



DEPARTMENT OF
ECOLOGY
State of Washington

Concise Explanatory Statement Chapter 173-350 WAC Solid Waste Handling Standards

Summary of rulemaking and response to comments

August 2018
Publication no. 18-07-017

Publication and Contact Information

This report is available on the Department of Ecology's website at <https://fortress.wa.gov/ecy/publications/SummaryPages/1807017.html>

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Concise Explanatory Statement

Chapter 173-350 WAC Solid Waste Handling Standards

Solid Waste Management Program
Washington State Department of Ecology
Olympia, Washington

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Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide Ecology's response to public comments.
- This Concise Explanatory Statement provides information on The Washington State Department of Ecology's (Ecology) rule adoption for:

Title: Solid Waste Handling Standards

WAC Chapter(s): 173-350

Adopted date: August 1, 2018.

Effective date: September 1, 2018.

To see more information related to this rulemaking or other Ecology rulemakings please visit our website: <https://ecology.wa.gov/About-us/How-we-operate/Laws-rules-rulemaking>.

Reasons for Adopting the Rule

Based on experience implementing the rule, and input from stakeholders over a period of more than ten years, Ecology identified many areas in need of improvement. A summary and explanation of changes follows below. This summary does not address all changes to the rule, and readers should consult the rule for requirements specific to their interest for additional details.

We made multiple changes for clarity and consistency throughout the rule, and for consistency with current laws and rules. We consistently aligned subsections in various sections of the rule for different types of facilities to make it easier for the reader to find requirements from section to section. These changes facilitate a better understanding of, and improved compliance with requirements of the rule.

Ecology amended and added definitions (section 100) to improve clarity, and create distinct terminology to aid in application of the rule. We updated permit processes (sections 700, 710 and 715) to reflect current statutory requirements and address an identified need for a permit transfer process. We also updated the process and revised beneficial use permit exemptions (section 200) to clarify requirements. We added and revised exclusions from the rule (section 020 - Applicability), and exemptions to permitting requirements (found in individual sections throughout the rule). We added a new section (021 – Determination of solid waste) that establishes a series of tests for determining whether something is a solid waste. This helps identify commodities apart from solid waste, and will improve consistency in application and enforcement of the rule.

The adopted rule combines and aligns the requirements for material recovery facilities and recyclers (section 210), improves covered facilities' ability to identify requirements for a permit or exemption, and addresses inconsistencies. The section addressing intermediate solid waste handling facilities (section 310) now focusses on transfer stations and drop box facilities only. These changes address an identified need to promote recycling, identify and manage solid waste appropriately, and facilitate compliance.

We made multiple changes to requirements for the management of piles used for storage or treatment of solid waste (section 320). These changes were necessary to address confusion and inconsistencies regarding the amount of time wastes can remain in place without a permit. We also added exemptions for piles in certain circumstances, in some cases recognizing coverage under a general permit issued by Ecology's Water Quality program as addressing solid waste handling concerns.

The adopted rule adds language to require gates or barriers at facilities with surface impoundments or tanks, and requirements for leak testing, including in ancillary equipment.

We revised waste tire storage requirements (section 350) and moved criteria for waste tire transportation to a new section (355). We provided a new threshold for the storage of waste tires from heavy equipment, and updated requirements to protect staff and first responders in the event of a fire.

We made it easier for product takeback centers to operate but maintained requirements for safe collection and handling of moderate risk waste (section 360).

We revised the timeframe for post-closure requirements at limited purpose landfills so that it is based on potential risk, rather than explicit time. The adopted rule also requires environmental covenants to address potential identified compliance and long-run land use needs.

The rule modernizes data submittal for groundwater analysis, and adds analytical requirements necessary to accurately determine whether groundwater quality standards are exceeded.

Amendments to financial assurance requirements ensure full funding of closure and post-closure if the local jurisdictional health authority must assume responsibility.

We repealed a section on the criteria for inert waste (990). The rule reverts to a specific statutory list of wastes acceptable for disposal in an inert waste landfill. Acceptable wastes are addressed in definitions (section 100) and in the inert landfill section (410).

The rule now defines clean soils and dredged sediments, and contaminated soils and dredged sediments, and adopts standards under the Model Toxics Control Act as the threshold for contamination based on current land use at the site of disposal. Contaminated soils and dredged materials are solid waste and disposal must occur at an appropriately permitted solid waste handling facility. This change resolves many years of confusion and implementation problems associated with soils that were clearly not clean, but for which no specific threshold or remedy was established under the solid waste rule.

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Differences Between the Proposed Rule and Adopted Rule

RCW 34.05.325(6)(a)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the Washington State Register and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

There are some differences between the proposed rule filed on January 23, 2018 and the adopted rule filed on August 1, 2018. Ecology made these changes for all or some of the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

Other than strictly editorial changes, the following content describes the changes and Ecology's reasons for making them.

WAC 173-350-020 Applicability

(2) This chapter does not apply to the following...

~~... (y) Contaminated soil, as defined in WAC 173-350-100, removed from the ground, not altered by additional contaminants, and placed or stored back at or near the location of generation within a project site. This exclusion is not meant to allow distant movement of materials within large or linearly long project sites to new locations that could potentially create new environmental impacts;...~~

We revised the rule to clarify that the exclusion for contaminated soil applies only to soil that is removed from the ground, without any alterations to its quality, and placed back at the location where it originates. The intent of the rule is to prevent the creation of new sites potentially subject to cleanup under the state Model Toxics Control Act.

~~(ee) In accordance with RCW 70.95.207—(the new section created in chapter 196, Laws of 2018), an authorized collector of covered drugs regulated under chapter 69.48— RCW (the new chapter created in chapter 196, Laws of 2018) is not required to obtain a permit under RCW 70.95.170 unless the authorized collector is required to obtain a permit under RCW 70.95.170 as a consequence of activities that are not directly associated with the collection facility's activities under chapter 69.48— RCW (the new chapter created in chapter 196, Laws of 2018).~~

We revised the exclusion for collection of pharmaceutical products. The 2018 Legislature adopted new laws governing the collection of pharmaceutical products, exempting that activity from solid waste handling standards. At the time the rule was proposed, we were waiting for the new law to be codified under the Revised Code of Washington. It was necessary to reflect the new law since affected facilities are not subject to the solid waste regulations as a result of accepting pharmaceutical products. The adopted language was updated to reflect the assignment of a number under the RCW.

WAC 173-350-021 Determination of solid waste

(2) A material is a solid waste if it meets any of the criteria in (a) through (g) of this subsection:

(a) The material has been discarded, abandoned, or disposed of;

(b) The material has been permanently placed in or on land for the purpose of disposal;

~~(e) The material is a by-product generated from the manufacturing or processing of a product, and is placed on the land for beneficial use;~~

~~(d) The material has been collected through residential or commercial solid waste or recyclable material collection;~~

~~(e) The material has been received at a solid waste handling facility for recycling, incineration, disposal, or beneficial use as those terms are defined in WAC 173-350-100;~~

(~~f~~e) The generator has paid for or will need to pay for removal or processing of the material for solid waste recycling, storage, incineration, disposal, or beneficial use as those terms are defined in WAC 173-350-100 or landfilling; or... (3) A material that met any of the criteria in subsection (2) of this section is no longer a solid waste if it meets all of the criteria in (a) through (e) of this subsection:

(a) The material is no longer discarded or abandoned;

(b) The material has been separated from solid wastes...

We found the language in 2(c) to be vague on its own, and Ecology believed it fit better under (d), with other changes clarifying the kinds of activities that relate to solid waste handling. Commenters objected to the use of the term “solid waste” in (e) because they felt it created circular logic in a section that was intended to determine whether something was solid waste. Commenters also pointed out that many things are stored at a solid waste facility – supplies and materials necessary for operation – that are not solid waste. We inserted language regarding separation of materials back in 3(b) because stakeholders believed it was important to capture the idea that commodities (things that are not solid waste) must be separated from solid waste.

WAC 173-350-030 Effective dates

(3)(a)(ii)(A) If obtaining other regulatory approvals necessary to complete a solid waste permit application is not possible within the twelve months of the effective date associated with each solid waste handling unit at a facility, the applicant may request a six month extension from the health department and the department, not to exceed two requests.

(B) Any approval for an extension requires written concurrence from the department.

We added an allowance for up to two, six-month permit extensions for existing facilities not previously subject to the rule. Ecology is aware that some elements of local permit processes are backlogged, including review of checklists and threshold determinations under the State Environmental Policy Act. Ecology wanted to ensure that existing facilities not previously subject to permitting would not become noncompliant for reasons beyond their control.

WAC 173-350-100 Definitions

“Active life” means the period beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with a facility’s permit requirements.

We revised the definition of active life to clarify the line between the active life of a facility and its closure, and the post-closure period (if applicable).

~~“By-product” means a material that is not one of the primary products of a manufacturing production process. A by-product is not produced for the general public’s use.~~

We deleted this definition of by-product because the related use of this concept in the rule was eliminated.

“Clean dredged material” means dredged material that does not contain contaminants from a release. It also includes dredged material that contains one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

(a) Does not contain contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act—Cleanup, that would be established for existing land use at the location where dredged material is placed; or...

"Clean soil(~~s and clean dredged material~~)" means soil(~~(s and dredged material which are not dangerous wastes, contaminated soils, or contaminated dredged material as defined in this section))~~) that does not contain contaminants from a release. It also includes soil that contains one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

(a) Does not contain contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act—Cleanup, that would be established for **existing land use at the location where soil is placed**; or

(b) Contains contaminants that affect pH, but pH of the soil is between 4.5 and 9.5 or within natural background pH limits that exist at the location where soil is placed.

Examples of potentially clean soil may include but are not limited to soil from undeveloped lands unlikely to have impacts from release of contaminants associated with area-wide or local industrial or historical activities. This includes similar soils over which development may have occurred but land use is unlikely to have led to a release, such as use for residential housing, or over which development provided protection from impacts from a release, such as coverage by pavement. Soil with substances from natural background conditions, as natural background is defined in WAC 173-350-100, are clean soil under this rule.

Changes regarding clean soil and dredged material were made to clarify that when evaluating pollutants under the Model Toxics Control Act, current land use at the receiving site should be evaluated, not some possible future land use. We also provided examples to help clarify soils that are likely to be clean soil as defined.

"Contaminated dredged material" means dredged material (~~(resulting from the dredging of surface waters of the state where contaminants are present in the dredged material at concentrations not suitable for open water disposal and the dredged material is not dangerous waste and is not regulated by section 404 of the Federal Clean Water Act (P.L. 95-217))~~) containing one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

(a) Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340, Model Toxics Control Act—Cleanup, that would be established for **existing land use at the location where dredged material is placed**; or

(b) Contains contaminants that affect pH, and pH of the dredged material is below 4.5 or above 9.5 or is not within natural background pH limits that exist at the location where dredged material is placed.

Contaminated dredged material is solid waste and must be managed at a solid waste handling facility in conformance with this chapter or chapter 173-351 WAC, Criteria for municipal solid waste landfills. Characterization of material may be required based on solid waste facility acceptance standards. An example of a **potentially** contaminated dredged material may include, but is not limited to, dredged material from surface waters containing contaminants from a release.

"Contaminated soil(s)" means soil(~~(s removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean up activities and which contain harmful substances but are not designated dangerous wastes))~~) containing one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

(a) Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act—Cleanup, that would be established for **existing land use at the location where soil is placed**; or

(b) Contains contaminants that affect pH, and pH of the soil is below 4.5 or above 9.5 or is not within natural background pH limits that exist at the location where soil is placed.

Unless excluded in WAC 173-350-020, contaminated soil is solid waste and must be managed at a solid waste handling facility in conformance with this chapter or chapter 173-351 WAC, Criteria for municipal solid waste landfills. Characterization of material may be required based on solid waste facility acceptance standards. Examples of potentially contaminated soil may include, but are not limited to, street waste, petroleum contaminated soil, engineered soil, and soil likely to have contaminants from a release associated with industrial or historical activities.

We revised the definitions of contaminated soil and dredged materials to specify that the current land use is appropriate for consideration when making a determination under the Model Toxics Control Act (MTCA). Changes also clarify that contaminated soil is a solid waste and must be managed at an appropriately permitted facility. A revision also clarifies that screening or characterization requirements are based on solid waste facility acceptance policies, since the tie to MTCA criteria is based only on managing materials "on the ground," not at solid waste facilities.

~~"Domestic septage" means Class I, II or III domestic septage as defined in chapter 173-308 WAC, Biosolids management.~~

This definition of domestic septage was outdated, and we replaced it with the current definition in WAC 173-308 (see septage further below).

~~"Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities ((normally serve the general public with loose loads and)) receive waste from off-site, require waste placement directly into a container and not a tip floor, and serve the general public and not route collection vehicles.~~

We revised the definition of drop box facility to reflect that they are designed to serve the general public, but collection vehicles are not prohibited from delivering to drop boxes.

"Engineered soil" means soil that has been altered by the addition of man-made materials used to adjust soil engineering properties for construction projects, such as to alter shear strength or hydraulic conductivity of soil. Engineered soil includes, but is not limited to, soil with cementitious materials. Cured concrete and asphalt are not engineered soil.

We revised the definition of engineered soil to clarify that it does not include cured concrete or asphalt.

~~"Glass" means a non-crystalline amorphous solid material of a chemical composition which is in the categories of soda-lime glass or borosilicate glass. This includes flat glass, container glass, tempered soda-lime glass, and glass-ceramics. Other non-crystalline amorphous solid materials, including lead glass, specialty glasses containing toxic constituents at concentrations greater than those typically found in soda-lime or borosilicate glasses, and soda-lime or borosilicate glass which has been tainted through exposure to chemical, physical, biological, or radiological substances are not considered to be glass for the purposes of this chapter. typical window glass, glass containers, glass fiber, glass resistant to thermal shock, and glass ceramics. Glass materials containing significant concentrations of lead, mercury, or other toxic substances, and bulk loads of glass which contain non de minimis amounts of other materials may not be disposed of in inert waste landfills.~~

We replaced the definition of glass with an alternative definition that is more consistent with industry standards.

"Inert waste" means waste that is allowed to be received at an inert waste landfill as described in WAC 173-350-410.

At the request of stakeholders, we inserted a definition of inert waste to support the requirements in section 410, which more specifically identifies the kinds of wastes that are acceptable for disposal in an inert waste landfill.

"Limited purpose landfill" means a landfill ~~((which))~~ that is not ~~((regulated or permitted by other state or federal environmental regulations that))~~ an inert waste landfill and receives or has received only solid wastes ~~((limited by type or source))~~ designated as nonhazardous and are not municipal solid wastes. Limited purpose landfills include, but are not limited to, landfills that receive or have received segregated industrial solid waste, construction, demolition and ~~((landclearing))~~ land clearing debris, wood waste, ash (other than special incinerator ash), contaminated soil and contaminated dredged material. Limited purpose landfills do not include inert waste landfills, municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills, landfills disposing of special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards, landfills regulated under chapter 173-303 WAC, Dangerous waste regulations, or chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

We clarified the definition of limited purpose landfills to recognize that they may have received waste in the past.

"Lower explosive limit((s))" means the lowest percentage by volume of a mixture of explosive gases that will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure. ~~((lowest percentage by volume of a mixture of explosive gases that will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure))~~ minimum concentration of vapor in air below which propagation of a flame does not occur in the presence of an ignition source.

We reverted to the original definition of the lower explosive limit because it was consistent with other state and federal rules.

"Manufactured topsoil" means soil or dredged material mixed with materials that improve the quality of the soil or dredged material for establishing vegetation and/or for water quality treatment purposes. If used as fill, material is not manufactured topsoil. Manufactured topsoil containing solid waste such as, but not limited to, yard debris, laminate, plastic, or asphalt shingles, not otherwise excluded from this chapter, is subject to management under this chapter.

We revised the definition of manufactured topsoil to clarify that using solid waste, which includes yard debris, to manufacture topsoil is subject to standards in this chapter.

"MRW facility" means a solid waste handling unit that is used to collect, treat, recycle, exchange, store, consolidate, and/or transfer moderate risk waste. This does not include mobile systems ~~((and)),~~ collection events ~~((or)),~~ limited MRW facilities, or product take-back centers, or pharmaceutical collection programs that meet the applicable terms and conditions of WAC 173-350-360(2) ~~((or (3)))~~.

"Pharmaceutical collection program" means a program that collects unwanted pharmaceuticals, controlled or noncontrolled, from households only, that is authorized to collect under and is compliant with the requirements of Drug Enforcement Administration 21 C.F.R. Part 1317, Disposal (2014). *We struck the definition as well as other references to pharmaceutical collection programs following the*

adoption of new laws by the 2018 State Legislature, exempting pharmaceutical collection programs from regulation under solid waste laws.

“Septage” or “domestic septage” means a liquid or solid material removed from septic tanks, cess pools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks, or similar systems that receive only domestic sewage. Septage may also include commercial or industrial septage mixed with domestic septage if approved in accordance with the provisions in WAC 173-308-020(3)(g).

We added the definition for septage as found in Chapter 173-308, Biosolids Management.

“Soil” means material overlying bedrock consisting primarily of clay, silt, sand, or gravel size particles, and soil biota, that may contain de minimis amounts of other solid materials, such as incidental pieces of concrete or wood. Soil does not include dredged material. Cured concrete and asphalt are not soil.

We revised the definition of soil to clarify that incidental pieces of concrete and other solid materials (such as may occur on a construction site) do not mean that a material is not suitable for management as soil.

“Tip floor or tipping floor” means the receiving area for incoming waste at a transfer station, material recovery facility, or recycling facility where vehicles unload waste materials prior to processing or consolidation for transport. A container into which waste is directly deposited, such as a drop box, is not a tipping floor.

We added a definition for tipping floor to clarify the term as used in the rule, and to also clarify that drop boxes do not constitute a tipping floor.

“Waste tires” means any tires that are no longer suitable for their original intended purpose because of wear, damage or defect. Waste tires include Used tires, which were originally intended for use on public highways that are now considered unsafe for this use in accordance with RCW 46.37.425, ~~are waste tires.~~ Waste tires also include quantities of used tires that may be suitable for their original intended purpose when mixed with tires not suitable for their original intended purpose ~~considered unsafe per RCW 46.37.425.~~

We revised the definition of waste tires to clarify that waste tires include mixtures of waste tires and used tires.

“Wood waste” means ~~solid waste consisting of~~ wood pieces or particles determined to be solid waste per WAC 173-350-021 generated ~~from as a by-product or waste from the manufacturing of wood products,~~ construction, demolition, handling and storage of raw materials, trees, ~~and stumps,~~ and manufacturing of wood products. This may includes, but is not limited to, sawdust, chips, shavings, bark, pulp, (~~hogged fuel,~~) and log sort yard waste, but does not include wood pieces or particles containing paint, laminates, bonding agents, or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

We revised the definition of wood waste to remove a circular reference to solid waste (a determination to be made through referenced section 021). The change also clarifies that materials like sawdust may be, but are not necessarily solid waste.

WAC 173-350-210 Recycling and material recovery facilities

Table 210-A

Terms and Conditions for Solid Waste Permit Exemption

	<u>Waste Materials</u>	<u>Specific Requirements for Activity or Operation</u>
(1)	<u>Cured concrete or wood waste at point of generation</u>	(a) <u>Meet the performance standards of WAC 173-350-040; and</u> (b) <u>Recycle and use materials back on-site.</u>
(2)	<u>Comingled brick, cured, concrete, or asphaltic materials</u>	<u>...(b) Recycle or ship for recycling at least 50 percent of all incoming material annually;</u> <u>(c) Comply with all applicable requirements of chapter 173-345 WAC, Recyclable materials– transporter and facility requirements...</u>
(3)	<u>Source-separated recyclable materials</u>	<u>...(c) Dispose of an incidental and accidental residual not to exceed five percent of weight or volume of the total waste received, by weight per year or per load, whichever is more stringent; and five percent by weight per load;...</u> <u>...(e) Recycle or ship for recycling at least 50 percent of all incoming material annually;</u> <u>(f) Comply with all applicable requirements of chapter 173-345 WAC, Recyclable materials- transporter and facility requirements;...</u>

(4) Recycling and material recovery facilities – Permit requirements – Design. Recycling and material recovery facilities must be designed so that the facilities can be operated to meet the performance standards of WAC 173-350-040, and the following design standards: ~~The owner or operator of a recycling or material recovery facility must prepare engineering reports/plans and specifications to address the following design standards:...~~

...(g) Convey leachate from the tipping floor and any ancillary areas likely to collect leachate, such as wash down areas, to a surface impoundment, tank, or sanitary sewer, or use other methods approved by the jurisdictional health department to prevent uncontrolled discharge;

(5) Recycling and material recovery facilities – Permit requirements – Documentation.

(a) The owner or operator must submit facility drawings and construction documents for, at a minimum, any proposed addition or modification of elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The facility drawings and construction documents for proposed construction of engineered features must be prepared by a professional engineer registered in the state of Washington, and must include...

(6)(a)(iv)(C) Provide attendant(s) on-site during hours of operation. Materials may be transferred after hours without an attendant on-site if other controls approved by the jurisdictional health department are in place;

A significant intent in the revision of the rule was to distinguish between commodities and solid waste, and to curb the potential for the speculative accumulation of large amounts of waste disguised as recycling. Stakeholders suggested and Ecology concurs it is reasonable to recycle half of incoming material on an annual basis. We revised Table 210 A to reflect that requirement, which also better aligns section 210 with the standards in section 320 for the temporary accumulation of wastes in piles. Compliance with the requirements in WAC 173-345 is obligatory for applicable operations, and Ecology included a reference on request.

The amount of waste residual allowable in source-separated materials is limited to five percent under the adopted rule. In Table 210 A, Ecology had eliminated weight as a metric, in favor of volume, but stakeholders pointed out that the metric depends on the kind of material. Ecology returned weight as an appropriate measure, in addition to volume. This standard determines whether a permit may be required, and is not a threshold for determining whether the material is a solid waste.

We revised subsections (4) and 5(a) of section 210 to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

In 4(g) of section 210 we further specified that leachate collection must extend to areas other than the tipping floor if leachate is likely to be generated. This revision is necessary to ensure compliance with state water quality rules.

We revised subsection (6) of section 210 to accommodate local jurisdictional health department approval of operations that may desire or need to have extended hours of operation when an attendant is not on site.

WAC 173-350-240 Energy recovery and incineration facilities

~~((3)) (4) Energy recovery and incineration facilities – Permit requirements - Design ((standards- There are no specific design standards for)), Energy recovery ((or)) and incineration facilities ((subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under)) must be designed so that the facility, including the following features, can be operated to meet the performance standards of WAC 173-350-040...;((5)). The owner or operator of an energy recovery or incineration facility must prepare engineering reports/plans and specifications to address the following:~~

(5) Energy recovery and incineration facilities – Permit requirements – Documentation.

(a) The owner or operator must submit facility drawings and construction documents for, at a minimum, any proposed addition or modification of elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The facility drawings and construction documents for proposed construction of engineered features must be prepared by a professional engineer registered in the state of Washington and must include...

We revised subsections (4) and 5(a) to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

WAC 173-350-300 On-site storage, collection, and transportation standards

...(c) In compliance with WAC 173-345-040 and RCW 70.95.020, all sites where recyclable materials are generated and transported for recycling must provide a separate container for nonrecyclable materials (solid waste).

We revised section 300 to require a separate container for nonrecyclable materials where recyclable materials are collected. This is consistent with state goals under Chapter 70.95 RCW to prioritize recycling ahead of disposal, and helps reduce the potential for contamination of recyclable materials with nonrecyclable solid wastes.

WAC 173-350-310 ((Intermediate solid waste handling)) Transfer stations and drop box facilities

(4) (~~Intermediate solid waste handling~~) **Transfer stations and drop box facilities – Permit requirements - Design** (~~standards~~). Transfer stations and drop box facilities must be designed so that the facilities can be operated to meet the performance standards of WAC 173-350-040, and the following design standards: ~~The owner or operator of all ((intermediate solid waste handling)) transfer stations or drop box facilities ((shall)) must prepare engineering reports/plans and specifications to address the following design standards:~~

(a)(vii) Convey leachate from the tipping floor and any ancillary areas likely to collect leachate, such as wash down areas, to a surface impoundment, tank, or sanitary sewer, or use other methods approved by the jurisdictional health department to prevent uncontrolled discharges;...

...(b) (ii) Provide ~~drop boxes detachable containers~~ constructed of durable, watertight materials with a lid or screen on top that prevents litter, the loss of materials during transport, and access by ~~rats rodents~~ and other vectors(~~, and control litter~~). When reliably watertight detachable containers cannot be assured, the containers may alternatively be placed on an impervious surface with run-on and runoff controls.

(5) Transfer station and drop box facilities – Permit requirements – Documentation.

(a) The owner or operator must submit facility drawings and construction documents for, at a minimum, any proposed addition or modification of elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The facility drawings and construction documents for proposed construction of engineered features must be prepared by a professional engineer registered in the state of Washington, and must include...

(6)(b) (i) Provide attendant(s) ~~are~~ on-site during hours of operation. Materials may be transferred after hours without an attendant on-site if other controls approved by the jurisdictional health department are in place...

We revised subsections (4) and 5(a) to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

In 4(a)(vii) we further specified that leachate collection must extend to areas other than the tipping floor if leachate is likely to be generated. This revision is necessary to ensure compliance with state water quality rules.

In the case of containers that may leak, the rule was revised to recognize that placement on a tipping floor with leachate collection is a reasonable alternative to protect water quality.

We revised subsection (6) to accommodate local jurisdictional health department approval of operations that may desire or need to have extended hours of operation when an attendant is not on site.

WAC 173-350-320 Piles used for storage or treatment

Table 320-A

Terms and Conditions for Solid Waste Permit Exemptions

	<u>Waste Materials</u>	<u>Volume, Storage Time, and Capacity Requirements</u>	<u>Specific Requirements for Activity or Operation</u>
(2)	<u>Agricultural waste and on-farm vegetative wastes stored on farms</u>	<p><u>No volume limit.</u></p> <p><u>The duration of storage of the entire pile is limited to one year and limited to the amount that will be applied to the-a site during a one-year period. Subsequent accumulation under the same conditions is allowed at the same location after the entire pile has been used.</u></p>	<u>No notification or reporting requirements.</u>
(3)	<u>Wood waste, wood-derived fuel and nonferrous metals</u>	<p><u>Over 250 cubic yards up to 2,000 cubic yards total material on-site.</u></p> <p><u>At the end of each calendar year, the facility must have removed at least fifty percent of the sum of the volume of all waste present at the start of the calendar year and of the volume of all waste accepted during the calendar year.</u></p> <p><u>For example: A facility begins the calendar year with 300 CY of wood waste on hand. The facility accepts 400 CY during the calendar year. In order to meet this exemption requirement, at least $0.5 \times (300 + 400) = 350$ CY must be removed from the facility by the end of the calendar year, leaving no more than 349-350 CY on hand.</u></p>	<p><u>(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department and must be complete;</u></p> <p><u>(b) Maintain records on the volume of wastes received, processed, and moved off-site for five years; and</u></p> <p><u>(c) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:</u></p> <p><u>(i) Name and address of the facility;</u></p> <p><u>(ii) Calendar year covered by the report;</u></p>

	<u>Waste Materials</u>	<u>Volume, Storage Time, and Capacity Requirements</u>	<u>Specific Requirements for Activity or Operation</u>
			<u>(iii) Annual quantities and types of solid waste handled by the facility, including amounts received, amounts removed and where it went, and the amount of waste remaining at the facility at year's end, in tons cubic yards; and...</u>
(5)	<u>Temporary piles of contaminated soils and contaminated dredged material</u>	<u>No volume limit.</u> <u>All contaminated soils and contaminated dredged materials are removed from the site within ninety days. If new materials are placed on site at any time after ninety days has elapsed from the first delivery, a permit is required.</u>	<u>No notification or reporting requirements.</u>
(6)	<u>Temporary piles of contaminated soils and contaminated dredged material with a construction stormwater general permit</u>	<u>No volume limit.</u>	<u>No notification or reporting requirements.</u>

~~((3))~~ **(4) Piles used for storage or treatment – Permit requirements - Design** ~~((standards.~~

~~((a))~~. Piles used for storage or treatment of solid waste must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040, and the following design standards: - If applicable, the owner or operator of a pile((s)) used for storage or treatment ((shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to)) of solid waste must address the following design standards ((of this subsection.));

~~((4))~~ **(5) Piles used for storage or treatment – Permit requirements – Documentation.**

(a) The owner or operator must submit construction documents for any proposed addition or modification of elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The construction documents for proposed construction of engineered features addressed in subsection (4) (b) of this section must be prepared by a professional engineer registered in the state of Washington, and must include...

(6)(b)(iii) Annual ((quantity)) quantities and types of solid waste handled by the facility, including amounts received, amounts removed and the amount of waste remaining at the facility at year's end, in tons or cubic yards...

We revised subsection (2) of Table 320 A to reflect that the amount of material accumulated on a site during a year is based on what can be applied to a site, not strictly the site where the material is accumulated.

We revised subsection (3) of Table 320 A to specify cubic yards instead of tons, since yards are a more common metric.

We revised subsection (5) of Table 320 A to clarify that the requirement is to remove the material within 90 days and not continue to use the site afterward.

We added a new exemption in subsection (6) of Table 320 A to allow for unrestricted storage that is consistent with an approved Construction Stormwater General Permit.

We revised subsections (4) and 5(a) of section 320 to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

We also revised the language in subsection (6) of section 320 regarding annual reports to reflect cubic yards.

WAC 173-350-330 Surface impoundments and tanks

(4) Surface impoundments and tanks – Permit requirement - Design

(a) The owner or operator of a surface impoundment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. In determining pond capacity, volume calculations shall be based on the facility design, monthly water balance, and precipitation data. All surface impoundments shall)). Surface impoundments and tanks must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040, and the following design standards: ~~The owner or operator of surface impoundments and tanks regulated under this section must prepare engineering reports/plans and specifications to address the following design standards:~~

(5) Surface impoundments and tanks – Permit requirements – Documentation.

(a) The owner or operator must submit construction documents for, at a minimum, any **proposed addition or modification of** elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The construction documents **for proposed construction of engineered features** must be prepared by a professional engineer registered in the state of Washington, and must include...

We revised subsections (4) and 5(a) of section 330 to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

WAC 173-350-350 Waste tire storage ((and transportation))

(1) Waste tire storage ((and transportation)) - Applicability. ((This section is applicable to all:))

(a) These standards apply to facilities that store waste tires in quantities ((of)) greater than:

(i) ~~eight~~ Eight hundred automobile tires or ((the combined weight equivalent of sixteen thousand pounds)) ~~greater than eight tons~~ of ~~all types of~~ waste tires when each individual tire weighs less than five hundred pounds;

(ii) Twenty tons of heavy equipment tires when each individual tire weighs five hundred pounds or more.
((This section is not applicable))

~~((5))~~ (4) **Waste tire storage ((and transportation)) – Permit requirements - Design ((standards)).**
Waste tire storage facilities must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040. ~~The owner or operator of a waste tire storage ((area shall)) facility must prepare engineering reports/plans and specifications to address the design standards of this subsection.~~
The maximum number of tires to be stored on-site and the individual ((pile)) waste tire storage locations and ((sized shall)) sizes must be provided. ((The)) Facility ((shall be designed so that)) design requirements are as follows...

... (d) When waste tires are stored and not processed on site, tires that weigh less than five hundred pounds must be segregated from tires that weigh five hundred pounds of more...

(5) Waste tire storage – Permit requirements – Documentation.

(a) The owner or operator must submit construction documents for, at a minimum, any proposed addition or modification of elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The construction documents for proposed construction of engineered features must be prepared by a professional engineer registered in the state of Washington, and must include...

~~...~~ (10) **Waste tire storage ((and transportation – Solid waste permit requirements. The owner or operator shall)) – Permit application contents.** A person who stores an amount of waste tires more than exceeding eight hundred automobile tires or greater than eight tons of all types of the regulatory threshold established in subsection (1)(a) of this section waste tires must obtain a solid waste permit from the jurisdictional health department. All applications for permits ((shall)) must be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit ((shall)) must contain...

We revised subsection (1) to reflect input from stakeholders who told us that used heavy equipment tires can weigh several hundred pounds or more, making the standards for typical passenger and truck tires inappropriate. We broke out a category of tires that weigh five-hundred pounds or more, allowing an accumulation of up to twenty tons, typically carried on a flatbed trailer and not in and enclosed trailer. Heavy equipment tires must be segregated from tires that weigh less than 500 pounds to qualify for this provision. We also modified subsection (10) to reflect these respective limits as the threshold for permitting.

Changes in subsection (4) and 5(a) reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements, or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

WAC 173-350-355 Waste tire transportation

(1) **Waste tire transportation – Applicability.** These standards apply to persons engaged in the business of transporting waste tires except for...

... (d) The United States, the state of Washington, or any local government, or contractors hired by these entities, when involved in the cleanup or collection of ~~illegal waste tires piles; and~~ This includes municipal contractors providing solid waste collection services under chapter 35.21 RCW, Miscellaneous provisions.

~~(e) A city, town, or municipal contractor providing solid waste collection services under chapter 35.21 RCW; and...~~

Ecology proposed a new section 355, moving content related to the transportation of waste tires out of the existing section 350, leaving section 350 to address the storage of waste tires. In the proposed rule, we also added the text in (1)(e) to clarify an existing reference to contractors. On further analysis, we found (e) redundant with (d) and consolidated the proposed language in (e) with the existing (d).

WAC 173-350-360 Moderate risk waste handling

(2) ~~((Mobile systems and collection events.))~~ **Moderate risk waste handling – Permit exemptions.** In accordance with RCW 70.95.305, the operation of mobile systems ~~((and)),~~ collection events ~~((are subject solely to the requirements of (a) through (n) of this subsection and)),~~ limited MRW facilities, ~~and product take-back centers, and law pharmaceutical collection programs~~ managed in accordance with the terms and conditions in Table 360-A of this section are exempt from solid waste handling permitting. ~~((An owner or operator that does not comply))~~ If a facility does not operate in compliance with the terms and conditions ((ef)) established for an exemption under this subsection ((is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for a moderate risk waste handling facility)), the facility may be subject to the permitting requirements for solid waste handling under this chapter. In addition, violations of the terms and conditions of Table 360-A and this subsection may be subject to the ~~((penalty))~~ enforcement provisions of RCW 70.95.315...

Table 360-A

Terms and Conditions for Solid Waste Permit Exemptions

<u>Terms and Conditions for Permit Exemption</u>	<u>Mobile System</u> *	<u>Collection Event</u> *	<u>Limited MRW Facility</u>	<u>Product Take-Back Center</u>	<u>Pharmaceutical Collection Program</u>
(b) <u>Manage MRW in compliance with the performance standards of WAC 173-350-040;</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
(d) <u>Ensure MRW is handled in a manner that:</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

<u>Terms and Conditions for Permit Exemption</u>	<u>Mobile System</u> *	<u>Collection Event</u> *	<u>Limited MRW Facility</u>	<u>Product Take-Back Center</u>	<u>Pharmaceutical Collection Program</u>
(i) <u>Prevents a spill or release of hazardous substances to the environment;</u> (ii) <u>Prevents exposure of the public to hazardous substances; and</u> (iii) <u>Results in delivery to a facility that meets the performance standards of WAC 173-350-040;</u>					
(m) <u>Notify the jurisdictional health department and the department of any spills or discharges of MRW to the environment within twenty-four hours of knowledge of an incident;</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

* ~~The requirements of these columns do not apply to pharmaceutical collection programs conducted as a mobile system or collection event.~~

~~((§)) (4) **Moderate risk waste facilities - Permit requirements - Design** (*standards*). ((a)) Moderate risk waste facilities (MRW) must be designed **and constructed** so that the facility can be operated to meet the performance standards of WAC 173-350-040, **and the following design standards:** - **The owner or operator of a ((moderate risk waste)) MRW facility ((shall)) must prepare engineering reports/plans and specifications((, including a construction quality assurance plan,)) to address the ((following)) design standards of this subsection. ((Each MRW facility shall:))...**~~

~~... (a)(iii)(A)(III) Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system **in areas of the facility as required by state and local fire or building codes, where ((such)) a suppression system exists((:)).**~~

(5) Moderate risk waste facilities – Permit requirements – Documentation.

(a) The owner or operator must submit construction documents for, at a minimum, any **proposed addition or modification of** elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The construction documents **for proposed construction of engineered features** must be prepared by a professional engineer registered in the state of Washington and must include...

We removed references to pharmaceutical collection programs in Table 360 A, following the adoption of new laws by the 2018 State Legislature, exempting pharmaceutical collection programs from regulation under solid waste laws.

We revised subsections (4) and 5(a) of section 360 to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements

that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

WAC 173-350-400 Limited purpose landfills

~~((3))~~ (4) **Limited purpose landfills - Permit requirements - Design** ~~((standards. (a) This section applies to landfills with considerable variations in waste types, site conditions, and operational controls)). All landfills ((shall)) must be designed and constructed to meet the design standards of this subsection, the performance standards of WAC 173-350-040, ~~and and-((shall))~~ must be appropriate for and compatible with the waste, the site, and the operation. ~~The owner or operator of a limited purpose landfill ((shall)) must prepare engineering ((reports/plans)) reports, plans, and specifications((, including a construction quality assurance plan, to address the design standards of this subsection. An owner or operator shall be able to demonstrate during the permitting process that the design of a proposed landfill will mitigate threats to human health and the environment. When evaluating a landfill design, the jurisdictional health department shall consider the following factors)) to address the following factors:...~~~~

~~...~~ (b) Landfill gas control. Limited purpose landfills must be designed to control methane and other explosive gases to ensure they do not exceed:

~~(i) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);~~

~~(ii) The lower explosive limit for gases in soil or in ambient air at the property boundary or beyond; and~~

~~(iii) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures...~~

~~...((c)(i)(B) Will meet the landfill gas control requirements of (b) of this subsection. Controls methane and other explosive gases ((generated by the facility)) to ensure they do not exceed:~~

~~(I) Twenty five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);~~

~~(II) The lower explosive limit ((in soil)) for gases in soil or in ambient air ((for the gases)) at the property boundary or beyond; and~~

~~(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in ((offsite)) off-site structures...~~

~~...((c)(ii)(C)(III) The landfill will meet the landfill gas control requirements of (b) of this subsection. Explosive gases generated by the facility will not exceed((:(I) Twenty five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);~~

~~(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and~~

~~(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in offsite structures)) the criteria established in (b)(i) of this subsection...~~

~~(f)(i)(I) Provides for collection and removal of methane and other gases generated in the landfill when management is required to meet the requirements of (b) of this subsection...~~

(5) Limited purpose landfills – Permit requirements – Documentation.

(a) The owner or operator must submit construction documents for, at a minimum, any proposed addition or modification of elements of the landfill described in subsection (4) of this section to the jurisdictional health department for review and approval. The construction documents for proposed construction of engineered features must be prepared by a professional engineer registered in the state of Washington, and must include...

We revised subsections (4) and 5(a) to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

We revised language pertaining to landfill gas concentrations in subsections 4(b), (c) and (f) to specifically identify these concentration limits and points of compliance as a performance standard for limited purpose landfills generally.

The proposed rule established these standards once, as a design performance standard, and then cited it in the subsections establishing design requirements for liners and final covers in the operating requirements and the post-closure requirements. In the adopted rule, the concentration limits are identified as part of the performance standard for the liner. They are also repeated as part of the operating standards. Since other elements of landfill design and operations could also play a role in meeting these standards, Ecology determined that they should not be connected only to liner design and operating standards.

WAC 173-350-410 Inert waste landfills.

Table 410-A

Terms and Conditions for Solid Waste Permit Exemption

	<u>Waste Material</u>	<u>Volume</u>	<u>Specific Requirements for Activity or Operation</u>
(1)	<u>Inert wastes as listed in WAC 173-350-410 (1)(a)</u>	<u>250 cubic yards or less</u>	<u>(a) Meet the performance standards of WAC 173-350-040;</u> <u>(b) No notification or reporting requirements.</u>
(2)	<u>Inert wastes as listed in WAC 173-350-410 (1)(a)</u>	<u>Greater than 250 cubic yards, but no more than 2000 cubic yards</u>	<u>(a) Meet the performance standards of WAC 173-350-040;</u> <u>(b) Manage the operation to prevent the generation of fugitive dust;</u> <u>(c) Allow the department or the jurisdictional health department to inspect the site at reasonable times;</u>

	<u>Waste Material</u>	<u>Volume</u>	<u>Specific Requirements for Activity or Operation</u>
			<p>(d) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department and must be complete; and</p> <p>(e) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st of forms supplied by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:</p> <p>(i) Name and address of the facility;</p> <p>(ii) Calendar year covered by the report;</p> <p>(iii) Annual quantities and types of solid waste landfilled; and</p> <p>(iv) Any additional information required by the department.</p>

~~((3)) (4) **Inert waste landfills - Permit requirements - Design** (*standards*). Inert waste landfills must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040, and the design standards of this subsection. The owner or operator of an inert waste landfill ~~((shall)) must prepare engineering reports/plans and specifications to address the design standards of this subsection...~~~~

(5) Inert waste landfills – Permit requirements – Documentation.

(a) The owner or operator must submit construction documents for, at a minimum, any proposed addition or modification of elements of the landfill described in subsection (4) of this section to the jurisdictional health department for review and approval. The construction documents for proposed construction of engineered features must be prepared by a professional engineer registered in the state of Washington, and must include:

In Table 410 A, Ecology deleted a proposed conditional exemption provision for inert waste landfills between 250 and 2,000 cubic yards. This deletion was based on stakeholder feedback that a permit exemption for up to 2,000 cubic yards was excessive.

We revised subsections (4) and 5(a) of section 410 to reflect that existing elements of a facility do not necessarily need to be documented in the same manner as proposed new elements or existing elements that are proposed to be modified. The revision also clarifies that an engineer does not have to prepare every document.

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Response to Comments

Ecology received 56 submissions during the public comment period¹. Some individuals made more than one submittal. 47 different commenters responded during the public comment period. Staff assigned each submittal a separate commenter number. Staff assigned comments on a best fit basis to one of 23 topical areas, though many comments touched on aspects of more than one comment category. Staff parsed submissions into separate comments by topic (closely approximates doing so by section of the rule). Staff responded to 416 comments in total. In excerpting portions of submissions, the agency generally took comments verbatim without corrections, and tried to retain formatting used by the commenter to emphasize certain aspects of the remarks. Staff did not excerpt content that did not represent a comment or question. In cases where comments reflected similar issues, staff developed a primary response around one comment, and readers are referred to that response. There is no significance as to which comment the agency used to develop the primary response.

You can view the comments as received by Ecology on our website at:
<http://wt.ecology.commentinput.com/?id=N3EMG>.

Comment Categories

All comments were assigned to one of the following categories. Clicking on the category will take you to the start of that topic in the comment and response table.

1. Other	13. Groundwater Monitoring
2. Definitions	14. Permitting
3. Piles	15. Applicability
4. Inert Waste	16. Effective Dates
5. Tires	17. On-site storage collection transportation
6. Moderate Risk Waste	18. Shingles
7. Recycling & Material Recovery	19. Determination of Solid Waste
8. Transfer Stations & Drop Box Facilities	20. Surface Impoundments & Tanks

¹ Ecology received one set of comments by mail, posted after the closing date of the public comment period. They are a matter of record in the rulemaking file, but are not included in the formal agency response.

9. Beneficial Use Permit Exemptions	21. Rulemaking Administrative Process
10. Incineration	22. Soils & Dredged Materials
11. Limited Purpose Landfills	23. Performance Standards
12. Inert Waste Landfills	

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Commenters and Associated Comment Topics

The following five tables break commenters down into these groups: **Individuals**, **Agencies**, **Businesses**, **Organizations**, and **Consultant**. Comments are identified by topic for each submittal. Readers can go to the start of each topic area by clicking on the link in the topic column (electronic copy), or refer to the table of contents if reading a hard copy.

Individuals by Last Name			
Stakeholder Group	Commenter Name	Topics	Associated Comment Numbers
	Jackson, Sego	Piles	I-01-01
	Jenkins, Pam	Other	I-02-01, I-02-05
		Limited Purpose Landfills	I-02-02, I-02-03, I-02-06, I-02-07, I-02-08, I-02-09, I-02-10, I-02-11
		Groundwater Monitoring	I-02-12
		Surface Impoundments & Tanks	I-02-4

Agencies by Name			
Stakeholder Group	Commenter Name	Topics	Associated Comment Numbers
Benton-Franklin Health District	Coleman, James	Definitions	A-18-01, A-18-2
		Piles	A-18-3
		Inert Waste Landfills	A-18-04
City of Vancouver	Guillot, Nikki	Determination of Solid Waste	A-13-01
		Soils & Dredged Materials	A-13-02
Clallam County Health	Garcelon, Jennifer	Incineration	A-03-01

Clark County Public Health	Sutton, Melissa	Other	A-17-04
		Piles	A-17-05
		Transfer Stations & Drop Box Facilities	A-17-06
		Determination of Solid Waste	A-17-01, A-17-02
		Soils & Dredged Materials	A-17-03, A-17-07
Dredged Material Management Office, U.S. Army Corps of Engineers, Seattle District	Fourie, Heather	Soils & Dredged Materials	A-01-01, A-01-02
King County Solid Waste Division	Beatty, Kris	Shingles	A-14-01
King County Solid Waste Division	John, Morgan	Definitions	A-12-13, A-12-14, A-12-19
		Inert Waste	A-12-15
		Moderate Risk Waste	A-12-04, A-12-05
		Recycling & Material Recovery	A-12-12
		Transfer Stations & Drop Box Facilities	A-12-07, A-12-08, A-12-09, A-12-10, A-12-20
		Permitting	A-12-22
		Effective Dates	A-12-18
		Shingles	A-12-06
		Determination of Solid Waste	A-12-02, A-12-03, A-12-11, A-12-17
		Surface Impoundments & Tanks	A-12-16, A-12-21
Rulemaking Administrative Process	A-12-01		
Port of Grays Harbor	Lewis, Randy	Soils & Dredged Materials	A-20-01
Port of Tacoma	Warfield, Anthony	Piles	A-10-02, A-10-03
		Rulemaking Administrative Process	A-10-01
Public Health - Seattle & King County	Pon, Yolanda	Definitions	A-07-05
		Piles	A-07-07
		Inert Waste	A-07-03, A-07-04
		Moderate Risk Waste	A-07-02

		Transfer Stations & Drop Box Facilities	A-07-06
		Permitting	A-07-08
		Determination of Solid Waste	A-07-01
Seattle Department of Transportation	Dahl, Craig	Piles	A-02-03, A-02-04
		Soils & Dredged Materials	A-02-01, A-02-02
Seattle Public Utilities	Fife-Ferris, Susan	Moderate Risk Waste	A-21-06
		Recycling & Material Recovery	A-21-05
		Limited Purpose Landfills	A-21-7, A-21-08
		Inert Waste Landfills	A-21-09
		Shingles	A-21-02
		Determination of Solid Waste	A-21-01
		Soils & Dredged Materials	A-21-03, A-21-04
Snohomish County	Seitz, Natalie	Other	A-11-02
		Rulemaking Administrative Process	A-11-01, A-11-05, A-11-06, A-11-07
		Soils & Dredged Materials	A-11-03, A-11-04
Snohomish County Public Works	Seitz, Natalie	Rulemaking Administrative Process	A-15-01, A-15-02
Snohomish County Public Works - Road Maintenance	Seitz, Natalie	Piles	A-05-21, A-05-22
		Inert Waste	A-05-11
		Rulemaking Administrative Process	A-05-01, A-05-08, A-05-14, A-05-16, A-05-18, A-05-23, A-05-24, A-05-25, A-05-26, A-05-27
		Soils & Dredged Materials	A-05-02, A-05-03, A-05-04, A-05-05, A-05-06, A-05-07, A-05-09, A-05-10, A-05-12, A-05-13, A-05-15, A-05-17, A-05-19, A-05-20, A-05-28, A-05-29, A-05-30
Snohomish Health District	Alfred, Anne	Other	A-16-11
		Definitions	A-16-03, A-16-05, A-16-06, A-16-08, A-16-09
		Moderate Risk Waste	A-16-07, A-16-13

		Permitting	A-16-12
		Shingles	A-16-04
		Determination of Solid Waste	A-16-01
		Rulemaking Administrative Process	A-16-10
		Performance Standards	A-16-02
Tacoma-Pierce County Health Department	Bosch, David	Other	A-06-05, A-06-08
		Definitions	A-06-04, A-06-06, A-06-07, A-06-09, A-06-10
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		Inert Waste Landfills	A-06-26, A-06-27
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		Effective Dates	A-06-02
		On-site storage collection transportation	A-06-14
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		Soils & Dredged Materials	A-06-03
United States Department of Energy, Richland Office	McKarns, Anthony	Inert Waste	A-04-01, A-04-02, A-04-03
Utilities and Transportation Commission	LaRue, Ann	Determination of Solid Waste	A-08-01, A-08-02, A-08-03, A-08-04
WA Dept. of Ecology	Moon, Amy	Recycling & Material Recovery	A-09-01, A-09-02
Washington State Department of Transportation	White, Megan	Definitions	A-19-08
		Inert Waste	A-19-04, A-19-05
		Rulemaking Administrative Process	A-19-02
		Soils & Dredged Materials	A-19-01, A-19-03, A-19-06, A-19-07, A-19-09

Businesses by Name			
Stakeholder Group	Commenter Name	Topics	Associated Comment Numbers
Boise Cascade Wood Products, LLC	Steffensen, Eric	Piles	B-02-01
Boise Cascade Wood Products, LLC	Steffensen, Eric	Piles	B-03-01
CalPortland	Hinck, Matthew	Definitions	B-01-02
		Piles	B-01-04
		Tires	B-01-06, B-01-07
		Recycling & Material Recovery	B-01-05
		Determination of Solid Waste	B-01-03
		Soils & Dredged Materials	B-01-01
CPM Development Corp	McDonald, Jana	Definitions	B-11-02
		Piles	B-11-05
		Tires	B-11-04
		Rulemaking Administrative Process	B-11-01
		Soils & Dredged Materials	B-11-03
Granite Construction Company	Hitzel, Steve	Shingles	B-13-01
Granite Construction Company	Hitzel, Steve	Shingles	B-08-01
KapStone	Artiga, Roberto	Determination of Solid Waste	B-05-01, B-05-02, B-05-03, B-05-04, B-05-05
		Rulemaking Administrative Process	B-05-06
Lakeside Industries, Inc.	Neice, Amanda	Shingles	B-06-01
Lautenbach Recycling	Lautenbach, Troy	Other	B-14-11
		Definitions	B-14-02
		Piles	B-14-13
		Recycling & Material Recovery	B-14-04, B-14-07, B-14-08, B-14-09

		Transfer Stations & Drop Box Facilities	B-14-03, B-14-05, B-14-12
		Beneficial Use Permit Exemptions	B-14-06
		Determination of Solid Waste	B-14-01, B-14-10
		Surface Impoundments & Tanks	B-14-14
		Rulemaking Administrative Process	B-14-15
Lautenbach Recycling	Lautenbach, Troy	Shingles	B-15-01
Miles Resources	Ransavage, Ryan	Definitions	B-07-01
		Tires	B-07-04
		Shingles	B-07-03
		Determination of Solid Waste	B-07-02
Miles Sand & Gravel	Lewis, Dave	Definitions	B-12-01, B-12-02
		Piles	B-12-04
		Shingles	B-12-03
Nucor Steel Seattle	Jablonski, Patrick	Definitions	B-09-04
		Piles	B-09-01
		Soils & Dredged Materials	B-09-02, B-09-03
The Boeing Company	Shestag, Steve	Other	B-04-01, B-04-02
		Definitions	B-04-04, B-04-05
		Inert Waste	B-04-08
		Applicability	B-04-03
		Determination of Solid Waste	B-04-06, B-04-07
Waste Connections	Snyder, Jody	Definitions	B-16-03
		Piles	B-16-06
		Recycling & Material Recovery	B-16-04, B-16-05
		Limited Purpose Landfills	B-16-08
		Inert Waste Landfills	B-16-07
		Applicability	B-16-02
		Determination of Solid Waste	B-16-01
		Other	B-16-09
Waste Management of Washington, Inc.	Kaminski, Kim	Other	B-10-11
		Piles	B-10-07, B-10-08, B-10-09
		Permitting	B-10-10, B-10-12
		Applicability	B-10-01

		Determination of Solid Waste	B-10-02, B-10-03, B-10-04, B-10-05
		Performance Standards	B-10-06

Organizations by Name			
Stakeholder Group	Commenter Name	Topics	Associated Comment Numbers
Associated General Contractors (AGC) of WA	VanderWood, Jerry	Definitions	O-09-04
		Piles	O-09-05
		Determination of Solid Waste	O-09-02
		Soils & Dredged Materials	O-09-01, O-09-03, O-09-06
Association of Washington Business	Chandler, Gary	Other	O-07-02
		Determination of Solid Waste	O-07-01
Citizens for a Healthy Bay	Malott, Melissa	Other	O-01-02
		Piles	O-01-03, O-01-04, O-01-05
		On-site storage collection transportation	O-01-01
Northwest Pulp & Paper Association	McCabe, Christian	Definitions	O-04-02
		Determination of Solid Waste	O-04-01
Regional Road Maintenance Forum		Piles	O-02-20, O-02-21
		Rulemaking Administrative Process	O-02-07, O-02-10, O-02-13, O-02-15, O-02-22, O-02-23, O-02-24, O-02-25, O-02-26, O-02-27
		Soils & Dredged Materials	O-02-01, O-02-02, O-02-03, O-02-04, O-02-05, O-02-06, O-02-08, O-02-09, O-02-11, O-02-12, O-02-14, O-02-16, O-02-17, O-02-18, O-02-19, O-02-28, O-02-29
Washington Aggregates and Concrete Association	Chattin, Bruce	Other	O-12-06
		Definitions	O-12-03
		Piles	O-12-05
		Determination of Solid Waste	O-12-02, O-12-04
		Soils & Dredged Materials	O-12-01

Washington Asphalt Pavement Association	Gent, Dave	Shingles	O-11-01
Washington Asphalt Pavement Association	Gent, David	Shingles	O-03-01
Washington Public Ports Association	O'Keefe, Gerry	Piles	O-06-04
		Rulemaking Administrative Process	O-06-02, O-06-03
		Soils & Dredged Materials	O-06-01
Washington Refuse and Recycling Association	Whittaker, Rod	Other	O-13-01, O-13-04, O-13-05, O-13-06, O-13-07
		Determination of Solid Waste	O-13-02, O-13-03
		Soils & Dredged Materials	O-13-08, O-13-09
Washington Refuse and Recycling Association	Whittaker, Rod	Other	O-14-01, O-14-03, O-14-06, O-14-07, O-14-13, O-14-15, O-14-21
		Definitions	O-14-04
		Tires	O-14-16
		Recycling & Material Recovery	O-14-08, O-14-09, O-14-10, O-14-11
		Transfer Stations & Drop Box Facilities	O-14-12
		Inert Waste Landfills	O-14-14
		Determination of Solid Waste	O-14-2, O-14-5
		Rulemaking Administrative Process	O-14-17
Washington Refuse and Recycling Association	Whittaker, Rod	Other	O-15-07, O-15-09, O-15-13, O-15-17, O-15-18, O-15-20, O-15-21, O-15-22, O-15-23, O-15-25, O-15-26, O-15-27, O-15-28, O-15-29, O-15-34, O-15-40, O-15-46
		Definitions	O-15-02, O-15-05, O-15-10, O-15-12, O-15-41, O-15-47, O-15-48

		Piles	O-15-30, O-15-31, O-15-32, O-15-33, O-15-35
		Recycling & Material Recovery	O-15-16, O-15-19, O-15-24
		Limited Purpose Landfills	O-15-36, O-15-37
		Applicability	O-15-11
		Determination of Solid Waste	O-15-03, O-15-04, O-15-06
		Rulemaking Administrative Process	O-15-01, O-15-08, O-15-14, O-15-15, O-15-50
		Soils & Dredged Materials	O-15-38, O-15-39, O-15-42, O-15-43, O-15-44, O-15-45, O-15-49
Washington Refuse and Recycling Association	Whittaker, Rod	Other	O-16-02
		Transfer Stations & Drop Box Facilities	O-16-03, O-16-04
		Determination of Solid Waste	O-16-01
		Soils & Dredged Materials	O-16-05, O-16-06, O-16-07, O-16-08
Washington Refuse and Recycling Association	Whittaker, Rod	Recycling & Material Recovery	O-10-02
		Determination of Solid Waste	O-10-01
Washington Refuse and Recycling Association (WRRRA)	Whittaker, Rod	Other	O-05-01, O-05-08
		Definitions	O-05-04, O-05-05
		Piles	O-05-11, O-5-12
		Recycling & Material Recovery	O-05-07, O-05-09
		Limited Purpose Landfills	O-05-14, O-05-15
		Inert Waste Landfills	O-05-13
		Applicability	O-05-3
		Determination of Solid Waste	O-05-2
		Rulemaking Administrative Process	O-05-10
		Soils & Dredged Materials	O-05-06
Zero Waste Washington	Trim, Heather	Other	O-08-02
		Soils & Dredged Materials	O-08-01

Consultants			
Stakeholder Group	Commenter Name	Topics	Associated Comment numbers
Cascadia Consulting Group	Morgan, McKenna	Shingles	OTH-01-01

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Comments and Responses

When viewing the document in electronic format, you can use the find feature of your software to locate a commenter (e.g. I-02, B-04), or a specific comment (e.g. A-07-04, O-01-01). You can also find individual comments in the index at the end of this document.

1. Other	Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments
Comment	Response
<p>I-02-05</p> <p><u>WAC 173-350-210 (5) Recycling and material recovery facilities – Permit requirements – Documentation.</u></p> <p>Paragraph (a) clearly specifies that construction documents submitted to the jurisdictional health department for review and approval must be prepared by a professional engineer registered in the state of Washington. This paragraph should also state that such documents must be reviewed for approval for the jurisdictional health department by a professional engineer registered in the state of Washington, who is either on staff at the jurisdictional health department or whose services are contracted by the health department. It simply does not work to have a non-engineer review engineering documents for approval. A non-engineer will not be prepared to understand the technical elements of facility design, equipment specification, liquid waste and air emissions capture or treatment, liner and cover specifications, and so on, and therefore will not be able to identify errors or inappropriate design features in those</p>	<p>I-02-05</p> <p>Ecology notes that the issue raised by the commenter also could be applied to geological and hydrogeological submittals that the proposed rule requires be prepared by licensed professionals. Ecology recognizes the importance of having documents which are based on the judgment of licensed professionals be reviewed by similarly-licensed professionals.</p> <p>It is true that many jurisdictional health departments (JHDs) do not have such licensed professionals available on staff to provide that level of review. Under the mandates of Chapter 70.95 RCW, Ecology provides a range of technical assistance to JHDs. One aspect of that technical assistance is review of submittals requiring professional review by Ecology's staff registered professional engineers and licensed hydrogeologists. Additionally, Ecology is required by statute to review solid waste permits applications and issued permits.</p> <p>The commenter's suggested language could complicate that technical assistance relationship by specifying that the relationship between the reviewing licensed professional and the JHD must be either in the form of employment or contracted service. Ecology's technical assistance to JHDs does not fit within either category.</p>

documents. Suggested language for paragraph (a):

“The facility drawings and construction documents must be prepared by a professional engineer registered in the state of Washington, and must be reviewed by a professional engineer registered in the state of Washington who is employed by or whose services are contracted to the jurisdictional health department. Subject drawings and construction documents must include:” etc.

This comment applies to each location in the proposed revised regulation that addresses facility drawings and construction documents, as follows:

WAC 173-350-240 (5) Energy recovery and incineration facilities – Permit requirements – Documentation. (a)

WAC 173-350-310 (5) Transfer station and drop box facilities – Permit requirements – Documentation. (a)

WAC 173-350-320 (5) Piles used for storage or treatment – Permit requirements – Documentation. (a)

WAC 173-350-330 (5) Surface impoundments and tanks – Permit requirements – Documentation. (a)

WAC 173-350-350 (5) Waste tire storage – Permit requirements – Documentation. (a)

<p><u>WAC 173-350-360 Moderate risk waste handling. (5) Moderate risk waste facilities – Permit requirements – Documentation. (a)</u></p> <p><u>WAC 173-350-400 (5) Limited purpose landfills – Permit requirements – Documentation. (a)</u></p> <p><u>WAC 173-350-410 (5) Inert waste landfills – Permit requirements – Documentation. (a)</u></p> <p>[Commenter: I-02]</p>	
<p>I-02-01</p> <p><u>WAC 173-350-100 Definitions.</u></p> <p>The definition of “closure plan” uses the phrase “active life,” which is somewhat in conflict with the definition of “active area.” “Active area” includes the location(s) in a facility where solid waste activities “have been conducted” (past tense); therefore, a facility’s “active life” is forever, as long as solid waste is still present. Therefore, the definition of “closure plan” might be better stated as:</p> <p>“Closure plan” means a written plan developed by an owner or operator of a facility detailing how a facility is to close at the end of its active life <u>conclusion of its solid waste receiving or processing activities.</u>”</p> <p>[Commenter: I-02]</p>	<p>I-02-01</p> <p>Ecology notes that Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills provides a definition for "active life," which itself is derived from federal law, 40 CFR 258, Criteria for Municipal Solid Waste Landfills. To be consistent across our state solid waste regulations, Ecology has added the following definition of "active life" to WAC 173-350-100:</p> <p>"Active life" means the period beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with a facility's permit requirements.'</p> <p>Related changes in language occur at WAC 173-350-400(3)(b)(iv)(A) and WAC 173-350-500(4)(g), where references to a closure period are deleted from the scope of requirements in those portions of the proposed rule.</p>
<p>B-14-11</p> <p><u>WAC 173-350-250 Anaerobic digesters.</u></p>	<p>B-14-11</p> <p>Substantive changes to WAC 173-350-250 were not included in the rulemaking scope outlined in the CR-101, Proposal Statement of Inquiry. Changing “must obtain a solid waste permit” to “may be</p>

<p>(2) Anaerobic digesters - Permit exemptions. In accordance with RCW 70.95.305, anaerobic digester facilities processing the types and volumes of materials identified in Table 250-A are subject solely to the requirements of Table 250-A and (b) of this subsection and are exempt from solid waste handling permitting. Feedstocks not listed in Table 250-A must be approved by the department. Violations of the terms and conditions of Table 250-A and (b) of this subsection may be subject to ((penalty)) enforcement provisions of RCW70.95.315.</p> <p>(a) An owner or operator that does not comply with the terms and conditions of Table 250-A and (b) of this subsection must((:</p> <ul style="list-style-type: none"> •)) obtain a solid waste handling permit from the jurisdictional health department((;)) and ((•)) comply with all applicable requirements of this chapter. <p>((Violations of the terms</p> <p>Comment: Subsection (a) implies a permit is required or a “must” if one fails to comply. It does not appear to give deference to the situation or type or frequency of violation.</p> <p>In other sections throughout this document where permit exemptions are allowed the language requiring a permit if there is a problem has been changed to make it clear that the health department has an option and that a permit is not mandatory. This section needs to change as well.</p>	<p>subject to the permitting requirements” is a substantive change and was not made during this rulemaking.</p>
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<p>I would propose using language that is used elsewhere in the document such as section 210 (2):</p> <p><u>Example From 173-350-210 (2):If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may be subject to the permitting requirements for solid waste handling under this chapter.</u></p> <p>[Commenter: B-14]</p>	
<p>O-07-02</p> <p>How will Ecology measure whether the proposed rule amendments to 173-350 WAC meet the following statutory performance objectives of state solid waste management and recycling:</p> <p>a. RCW 70.95.020(4) To encourage the development and operation of waste recycling facilities needed to accomplish the management priority of waste recycling, to promote consistency in the requirements for such facilities throughout the state, and to ensure that recyclable materials diverted from the waste stream for recycling are routed to facilities in which recycling occurs;</p> <p>b. RCW 70.95.020(7) To encourage the development and operation of waste recycling facilities and activities needed to accomplish the management priority of waste recycling and to promote consistency in the permitting requirements for such facilities and activities throughout the state.</p> <p>[Commenter: O-07]</p>	<p>O-07-02</p> <p>In the context of meeting the objectives of RCW 70.95.020, Ecology believes the adopted rule language does not represent a divergence from previous rule language. The rule does not impact the measurement tools the program currently has in place, such as the annual recovery or recycling rate.</p> <p>The addition of and changes to WAC 173-350-021 were designed to improve consistency in the oversight of materials across jurisdictions. The rule is applicable statewide. Ordinances adopted locally must be at least as stringent, and may be more stringent, provided there is no conflict with applicable statutes. However, variability in local implementation can result from staff turnover, local priorities, resources, and a host of other factors that can influence a jurisdictional health department’s attention to details in the permitting process.</p>
<p>O-01-02</p>	<p>O-01-02</p>

<p>R&D Loophole</p> <p>According to the proposed amendment:</p> <p>"Materials used in research and development activities intended to evaluate, develop, or demonstrate potential new or improved beneficial use, reuse, or recycling methods or technologies for solid wastes conducted by qualified persons in controlled laboratory, bench scale, or pilot study conditions at the facility at which the materials are generated, at another facility owned or operated by the generator, at an institution of higher education as defined in RCW 28B.10.016, at a higher education institution as defined in RCW 28B.07.020, or at a public or private laboratory or other facility contracted by the waste generator or institution to conduct such activities. These activities include the research and development operations, the separation, collection, transport, and transfer of such materials in support of those operations. Solid wastes handled in connection with such activities shall be reasonably limited to quantities needed to conduct the research and development project(s), and any excess or residual of such materials remaining after such activities and any solid waste generated by such activities shall be handled in accordance with this chapter or chapter 173-303 WAC, Dangerous waste regulations, as applicable."</p> <p><i>[The comment included a footnote linking to proposed rule language]</i></p> <p>This new section creates a significantly problematic loophole as the criteria for R&D us are extremely vague.</p>	<p>Ecology appreciates the concern for potential "worst case" situations but does not agree that this exclusion creates a major loop hole. The situation where this activity can occur is sufficiently limited and does not create an incentive to acquire an overabundance of materials that are the subject of the research. Should a risk to human health or the environment develop, Ecology believes there are sufficient state and local authorities to remedy such situations expeditiously.</p>
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<p>While the amendment does place some requirements on the sites, such as the nature of research and development, there is limited clarity over many of these requirements. The terms underneath the nature of the R&D are defined in the chapter, but neither "qualified persons" nor "reasonably limited quantities" are defined. Nor is the quantity of waste or duration of time that can still be considered "pilot scale". CHB requests these terms are clearly and reasonable defined, and that the standards require the draft and submissions of research proposals, including the amount of material necessary, to be approved and overseen by Ecology.</p> <p>Furthermore, the exclusion applies to the "separation, collection, transport, and transfer or such materials in support of those operations," allowing an even broader range of activities to be excluded from the standards.</p> <p>[Commenter: O-01]</p>	
<p>A-17-04</p> <p>For consistency, recommend utilizing the same terminology "rats" vs "rodents" throughout the document: (NOTE: prefer rodents) WAC 173-350-310(4)(b)(ii) "and access by rats and other vectors" WAC 173-350-310(4)(a)(iii); WAC 173-350-310(6)(iv)(B) "Control rodents, insects, and other vectors"</p> <p>[Commenter: A-17]</p>	<p>A-17-04</p> <p>Ecology agrees and changed the language in WAC 173-350-310(4)(b)(ii) from "rats" to "rodents" in the context of vector control, to improve consistency throughout the rule.</p>
<p>A-11-02</p> <p>The proposed rule would reduce the County's ability to comply with the underlying statute. The Revised Code of Washington 70.95</p>	<p>A-11-02</p> <p>The rule does not impact the ability of the county to reuse engineered soil as that activity is exempt from the rule under WAC 173-350-020(2)(w) when the</p>

<p>generally prioritizes recycling above disposal, and specifically requires the department of transportation and certain government entities to reuse construction aggregate and recycled concrete. The proposed rule would impact (lower) the County's ability to reuse engineered soil and construction aggregate, and increase the costs of awarding contracts that stipulate reuse of these materials.</p> <p><i>[The comment included footnotes to RCW 70.95.010 and RCW 70.95.805]</i></p> <p>[Commenter: A-11]</p>	<p>soil is reused, as defined in WAC 173-350-100, in another construction project for the same engineering properties.</p> <p>Regarding reuse of construction aggregate and concrete, please refer to the response to comment A-05-25.</p>
<p>A-16-11</p>	<p>A-16-11</p> <p>Ecology erroneously reflected a comment here. The number has been left to show that no content has been omitted.</p>
<p>A-06-08</p> <p>“Manufactured topsoil” – The TPCHD recommends including “yard debris” to the list provided in the last sentence. Therefore, the definition should read “.... Manufactured topsoil containing solid waste such as, but not limited to, yard waste, laminate, plastic, or asphalt shingles, not otherwise excluded from this chapter, is subject to management under this chapter.”</p> <p>[Commenter: A-06]</p>	<p>A-06-08</p> <p>Ecology agrees with the commenter and has made the suggested change to the definition of “manufactured topsoil.”</p>
<p>A-06-05</p> <p>"Domestic septage" - The TPCHD recommends that the definition be updated by removing the Class I-III classifications in order to be</p>	<p>A-06-05</p> <p>Ecology concurs. Chapter 173-308 WAC, Biosolids Management is the primary authority in this regard. The classes of septage reflect a previous definition in WAC 173-308-080 and can be replaced with the current definition in the biosolids rule. The definition of domestic septage has been revised to</p>

<p>consistent with the most current version of WAC 173- 308, <i>Biosolids Management Rule</i>.</p> <p>[Commenter: A-06]</p>	<p>say: "Septage" or "domestic septage" means a liquid or solid material removed from septic tanks, cess pools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks, or similar systems that receive only domestic sewage. Septage may also include commercial or industrial septage mixed with domestic septage if approved in accordance with the provisions in WAC 173-308-020(3)(g).</p>
<p>B-04-01</p> <p>As aerospace materials evolve to meet greater demands for aircraft fuel efficiency and lower greenhouse gas emissions, structural strength, and other requirements, the mix of secondary materials from aircraft manufacturing is also changing. Secondary fiber-reinforced composite materials (FRCM) from aerospace manufacturing operations include expired uncured prepreg fabric, residual scrap from cutting uncured and cured prepreps, scrap cured finished parts, and components removed from in-service aircraft for replacement. While each is different, they have physical properties that are valuable to secondary users.</p> <p>While some elements of the draft revisions to Chapter 173-350 WAC offer clarity about the definition of solid waste and permissible waste management practices, other elements are confusing and could stifle development of reutilization opportunities for materials such as FRCM that might not yet have well-established and consistent secondary markets. The following comments are offered in an effort to avoid creating regulatory disincentives that have the unintended consequence of discouraging new re-purposing opportunities for secondary materials. In the long term, regulatory streamlining will encourage activities that will reduce the volume of potentially useful materials being landfilled.</p> <p><i>[Commenter included the following footnote: Note that even though uncured FRCM might be</i></p>	<p>B-04-01</p> <p>Ecology understands that manufacturing activities evolve. Ecology appreciates Boeing's commitment to finding uses for residuals from its manufacturing processes and definitely does not want to discourage those opportunities. Historically, situations have arisen where ostensibly usable waste products were accumulated by a generator or second party, only to find that the secondary use was speculative and ultimately not viable. Ecology looks forward to working through issues like FRCM with Boeing and other manufacturers who have a commitment to reducing waste.</p>

<p><i>expired for the purpose of manufacturing flight-critical aerospace parts and components, these materials are reused in applications such as sports equipment and building materials.]</i></p> <p>[Commenter: B-04]</p>	
<p>B-04-02</p> <p>The Boeing Company appreciates and supports the proposed exclusion for research and development (R&D) activities that will enable and encourage development of new or improved solid waste reutilization techniques and technologies. The proposed R&D exclusion, while slightly modified from language offered by Boeing in previous comments, captures the essential elements and intent that such activities be exempt when conducted by qualified persons under controlled conditions. The explicit R&D exemption clarifies that status of such R&D projects, like the reinforced permeable pavement project seeking to demonstrate the viability of reusing leftover fiber reinforced composite materials to strengthen permeable pavement ---which is supported by Boeing and our stormwater improvement partners (including Department of Ecology, the Washington Stormwater Center, and Washington State University).</p> <p>[Commenter: B-04]</p>	<p>B-04-02</p> <p>Comment noted.</p>
<p>O-12-06</p> <p>The document will likely continue to be controversial. Overall, I remain concerned with the ability for subjective application,</p>	<p>O-12-06</p> <p>Ecology recognizes that different parties see the rule differently, and appreciates the Washington Aggregates and Concrete Association concern that controversy may continue. Ecology believes that it shares very similar goals with the commenter- to recognize the value of materials that have in past</p>

<p>interpretation and decision making that can take place at both ECY and JHD levels.</p> <p>Generally I see good improvements from where we started this discussion.</p> <p>[Commenter: O-12]</p>	<p>times been considered wastes, to further process them to meet applicable standards of a product or to find appropriate further uses, and to do so without adversely impacting the environment and in an economical or even profitable manner.</p>
<p>O-13-05</p> <p>WRRRA opposed the exemption of solid waste facilities from registration and inspection over a decade ago, and since then, our worst fears have been realized. The process, or lack of process, for exempt status, the self-reporting without auditing and the lack of control over the exemption process have all become a sad reality. WRRRA continues to oppose exempting facilities from solid waste oversight by DOE and Jurisdictional Health Departments (JHDs), which lack the resources to provide inspections without the support of permitting fees. The work group process has yet to reach the issue of exempt facilities in earnest, however this issue is of key importance to the association and solid waste industry. Currently, exempt facilities lack any solid waste oversight at the state and local level due to the exemptions, the management of the process and the lack of permitting fees to support inspections at the local level. This system has hurt Washington's solid waste system by providing a haven for sham recyclers and hurts cities and counties and legitimate state authorized and municipal contract collection and handling companies.</p> <p>[Commenter: O-13]</p>	<p>O-13-05</p> <p>Ecology understands WRRRA's longstanding position on the matter of exempt facilities. Chapter 70.95 RCW gives Ecology authority to establish exemptions for some activities. During the rulemaking process, there was not consensus amongst stakeholders to support elimination of the exemption process; however, conditions for exemption were thoroughly reviewed and amended as necessary. Ecology hopes the revised rule proves to be a better tool to address WRRRA's concerns. Ecology will continue to work with local governments and stakeholders to address sham recycling and to ensure a robust exemption process.</p>
<p>O-15-09</p> <p>Furthermore, a potentially large number of current solid waste facilities with mandatory reporting requirements will likely be deregulated under this new section. This may be</p>	<p>O-15-09</p> <p>The changes to the rule will result in an adjustment to the recycling rate. The annual measure of recycling rates will be set with a new baseline. Annual recycling reports with multiple years of data</p>

<p>a positive development for a number of facilities that are good actors and perhaps not truly handling solid waste in the first place. As these facilities exit solid waste regulation, so do their mandatory reporting requirements and the accompanying data. WRRRA is proud of Washington's average 50% recycling rate and the Department should have a substantial plan or mechanism in place to protect that number. Washington's recycling rate is an achievement everyone in the solid waste handling community should view with pride, not artificially deflate through deregulation.</p> <p>[Commenter: O-15]</p>	<p>will have to be annotated to indicate in the year the rule takes effect that there was a change in how numbers are reported. The new numbers will not be artificially deflated through deregulation but instead will be an accounting of how materials, as dictated by the rule, are now measured.</p>
<p>O-13-01</p> <p>The Washington Refuse and Recycling Association (WRRRA) has taken an active role in the 173-350 Rule Update process. Representatives of the association and member solid waste companies have participated in the work group process whenever and wherever allowed by the Department of Ecology (DOE). WRRRA is proud, as DOE should be, that Washington State is known nationally for having one of the premier solid waste handling systems in the country. Washington State's recycling rate of 50% which is 50% higher than the national recycling rate of 34% is just one point of reference to our excellent collection and solid waste handling system.</p> <p>The success of Washington's solid waste system is due in large part, to robust regulation and compliance as well as the enforcement of those regulations. However, a significant amount of solid waste handling activity goes effectively unregulated in Washington under current DOE rules and the lack of enforcement of other existing DOE laws and rules. This opens the door to sham recyclers who hurt cities, counties, the state and legitimate lawful companies while exposing Washington citizens to unnecessary environmental risks. WRRRA is concerned that</p>	<p>O-13-01</p> <p>Ecology appreciates the time WRRRA has invested in this rulemaking process. Ecology agrees that any form of sham recycling is undesirable. However, there is lack of agreement amongst stakeholders on the best approach to resolve the issue.</p> <p>Please refer to response to comment O-13-05.</p>

<p>several rule sections, particularly those on definitions, exempt facilities and soils, do not or have not yet offered solutions to these problems, but in fact make them worse. Please find our consolidated comments on the 173-350 Rule Update.</p> <p>[Commenter: O-13]</p>	
<p>O-13-04</p> <p>In Washington State, local governments have always had jurisdiction over certain aspects of solid waste and recycling. If a local government desires to treat some materials differently than others, it can be accomplished through their solid waste plan or by ordinance. WRRRA is concerned there are unintended consequences associated with the proposed rule which will have a detrimental impact on public safety and the environment and will compromise a well-functioning solid waste system.</p> <p>[Commenter: O-13]</p>	<p>O-13-04</p> <p>This comment was submitted early in the rulemaking process, and was incorporated by reference with comments from WRRRA submitted on the formal rule proposal. Ecology believes the adopted rule is an overall improvement, and does not represent a potential increase in impacts to public safety or the environment.</p>
<p>O-14-01</p> <p>WRRRA is proud, as the Department of Ecology (DOE) should be, that Washington State is known nationally for having one of the premier solid waste handling systems in the country. Washington State's impressive recycling rate, well above the national recycling rate, is just one point of reference to our excellent collection and solid waste handling system. The success of Washington's solid waste system is due in large part, to robust regulation which also requires adequate enforcement.</p> <p>WRRRA is concerned with the overall theme of "deregulation" present in this draft of the WAC 173-350 update. With a series of new exemptions regarding contaminated soils and hybrid waste landfills to complete deregulation</p>	<p>O-14-01</p> <p>In its response to the proposed rule, this commenter included legacy comments submitted during informal comment periods on earlier drafts of the rule. This comment predates the proposed rule and reflects draft language not found in the adopted rule. Other remarks by this commenter are captured elsewhere in this document.</p>

<p>of an unknown number of recycling and material recovery facilities through changes to key definitions, and the continuance of problematic exemptions coupled with a lack of enforcement regarding exempt Material Recovery Facilities (MRFs), we observe a strong trend toward deregulation and believe it to be the wrong direction for Washington. The success of Washington's system has proven that regulation not only works for solid waste, it is necessary at both the transportation and facility level.</p> <p>WRRRA views the 173-350 update process as a perfect opportunity to strengthen and preserve the integrity of Washington's excellent solid waste system by strengthening regulation, eliminating exemptions, and bolstering much needed reporting and enforcement efforts. All solid waste facilities in Washington should be subject to robust regulation, including regular inspections and reporting requirements which are subject to verification and robust enforcement should be pursued to ensure the success of the regulated system. The 173-350 update makes several commendable steps towards this goal, but falls short in many others as it shifts toward deregulation of solid waste facilities.</p> <p>[Commenter: O-14]</p>	
<p>O-15-13</p> <p>Applicability and Determination of Waste Comments Summary:</p> <p>Language in the Responsive Summary to previous comments should clarify that the determination of waste test is a tool to promote regulation, enforcement, and clarity.</p> <p>[Commenter: O-15]</p>	<p>O-15-13</p> <p>This comment refers to a responsiveness summary issued on an earlier draft of the rule, and is not directly related to proposed rule language.</p>

<p>O-15-07</p> <p>Fifth, WRRRA is concerned with the language in WAC 173-350 021(2)(g) which states a material is a solid waste if it "has been stockpiled for recycling, reuse, or for use after recycling, but no market is available and stockpiles violate the performance standards of WAC 173-350-040." It is questionable that the Department has the authority to enforce the solid waste handling standards on a material which is not yet designated as a solid waste, let alone as a precursor to making a determination that a material is solid waste. The intent of this language, to capture sites and materials that pose a risk to human health or the environment, is obviously correctly placed. However, referencing the performance standards which only apply to solid waste facilities before a material has been deemed a solid waste appears open to challenge. This section should be reworded to address the same situations but do so directly without citation to another section of questionable applicability.</p> <p>[Commenter: O-15]</p>	<p>O-15-07</p> <p>In the adopted rule, Ecology eliminated the reference to WAC 173-350-040 contained in WAC 173-350-021(2)(g). The item has been re-numbered, so WAC 173-350-021(2)(f) reads:</p> <p>“(f) The material has been stockpiled for recycling, reuse, or use after recycling, but no market is available and stockpiles provide vector attraction or harborage, or release pollutants into the environment in violation of other human health or environmental rules and regulations.”</p>
<p>O-15-22</p> <p>Fourth, the updated facilities section should also reference the Transporter Law In WAC 173-345 to collect more of the potential requirements for facility operators in a single place. Compliance with the Transporter Law should also be set out in the table as a requirement for exempt facilities where appropriate. The new table set forth in the rule should be a good tool for operators to more easily view their obligations, and including the Transporter Law should further that goal and provide for better compliance.</p> <p>[Commenter: O-15]</p>	<p>O-15-22</p> <p>Please see response to comment O-05-08.</p>

<p>O-15-28</p> <p>Recycling and Material Recovery Facilities Comments Summary:</p> <p>Exempt facilities section should reference the Transporter Law WAC 173-345 and require compliance with that law as a conditional of exemption.</p> <p>[Commenter: O-15]</p>	<p>O-15-28</p> <p>Please see response to comment O-05-08.</p>
<p>O-14-21</p> <p>WAC 173-350-405 Hybrid waste landfills.</p> <p>WRRRA questions the need for this new section and exemption given existing issues with inert waste landfills, the potentially dangerous nature of hybrid waste, failures with other exempt facilities, and the availability of state of the art highly regulated landfills which are ready, willing, and highly equipped to safely dispose of contaminated soil.</p> <p>Hybrid waste is defined as "a combination of impacted soil and/or impacted sediment, and inert waste." Impacted soil and sediment is contaminated soil and:</p> <p>"...contains one or more contaminants from a release at concentrations above those for clean soil and clean sediment... [and] may include... street waste, petroleum contaminated soil, sediment from surface waters containing contaminants, engineered soils, and soils likely to have contaminants from industrial or historical activities."</p> <p>By definition, contaminated or "impacted" can pose potential harm to human health or the</p>	<p>O-14-21</p> <p>This is a legacy comment submitted by the commenter in September 2016 on a preliminary draft of the rule. Ecology deleted WAC 173-350- 405 referenced in the comment in the course of subsequent proposed revisions to the rule.</p>

<p>environment and ought to be disposed of in a safe, reliable, and highly regulated environment.</p> <p>Inert waste landfills have proven to be problematic for several reasons. First, inert waste landfills have provided a haven for sham recyclers to achieve cheap disposal. Second, inert waste landfills are much more likely to become a "problem" in the long term. Whether as a clean-up site with no operator in sight or ability to cover the costs. Based on these factors, it is difficult to understand why contaminated soils should be transported to potentially exempt, unlined landfills as opposed to a highly regulated state of the art "40 CFR Part 258" or "Subtitle D" landfill.</p> <p>Today, many contaminated soils go to lined landfills which are highly regulated at both the state and federal level, with sophisticated groundwater monitoring, storm water controls, and gas collection and air emissions monitoring, in deep contrast to an unlined hole in the ground likely maintained by smaller and less reliable operators. WRRRA opposes exempt facilities, and hybrid waste landfills represent not only another problematic exemption for permitting requirements, but a dangerous one.</p> <p>[Commenter: O-14]</p>	
<p>O-15-40</p> <p>Third, the elimination of the hybrid waste landfills is also a positive change, necessary to both comply with RCW 70.95.065 and ensure protection of human health and the environment. We encourage the Department to avoid the creation of any other similar facilities or unlined and potentially hazardous facilities in future iterations of this draft.</p> <p>[Commenter: O-15]</p>	<p>O-15-40</p> <p>This legacy comment acknowledges a change in the rule structure between the first and second preliminary draft version; that change eliminated WAC 173-350-405. WAC 173-350-405 was also the object of legacy comment O-14-21, which objected to the section's creation in the first preliminary draft of the rule.</p>

<p>O-15-46</p> <p>Soil and Sediment Criteria and Use Comments Summary:</p> <p>The elimination of the hybrid waste landfills section from the previous draft is both a positive and necessary change and the Department should avoid creating similar facilities in the future.</p> <p>[Commenter: O-15]</p>	<p>O-15-46</p> <p>Please refer to the response to comment O-15-40.</p>
<p>O-13-06</p> <p>Currently Washington has two types of exempt facilities by rule, and a third informal category of unregulated solid waste facilities. WAC 173-350-210 & 310. Exempt facilities may accept only source separated recyclable materials and dispose of an incidental and accidental residual not to exceed 5% of the total waste received, by weight per year, or 10% by weight per load. WAC 173-350-310. However, these numbers are never verified by an on-the-ground-inspection or enforced by the department. Taken alone, this fact represents a true problem and a clear call for more regulation, permitting and oversight. The need for regulation and enforcement becomes even more apparent upon consideration of the possible environmental risks posed by these facilities, which go without inspection under the current system. The lack of inspection and oversight provides a haven for sham recyclers and threatens the integrity of Washington's solid waste system. When these facilities are walked away from by their operators, the taxpayers and rate payers bear their clean-up costs. WRRRA opposes exempt solid waste facilities.</p> <p>[Commenter: O-13]</p>	<p>O-13-06</p> <p>Please see response to comment O-13-05 and comment O-14-1.</p>

<p>O-13-07</p> <p>The sections regarding exempt facilities are the most important and concerning for the solid waste industry. At this time, we believe the definitions work group should move on to addressing exempt facilities as planned. The drafts produced by the definitions group appear to open the door even wider on exempt facilities, and go beyond the statutory definition of solid waste. Furthermore, DOE has indicated that the test developed by the definitions work group was intended to help DOE and the JHD address sham recycling. Yet the real issue begins with exempt facilities which have yet to be addressed, not the definition of solid waste. WRRRA requests that the definitions work group be placed on hold and transition to the real issue, exempt facilities and sham recycling.</p> <p>[Commenter: O-13]</p>	<p>O-13-07</p> <p>Please see response to comment O-13-05 and comment O-14-1.</p>
<p>O-14-03</p> <p>We are mindful that these decisions cannot be made in a regulatory vacuum. We have, throughout this process, been mindful of the necessity of DOE and the Washington Utilities and Transportation Commission (WUTC) working together on these issues. Thus we are pleased that the proposed criteria and the WUTC "factors" in WAC 480-70-160 are complimentary to each other, and certainly can be applied jointly in some situation. That being said, different statutes and agencies define solid waste differently, particularly with respect to commercial recycling. To promote consistency across these statutes we recommend adding the following passage, citing to existing law for clarity, as section 5 of the test: "Nothing in this chapter shall impact the rights of a commercial recycler, non-profit, or commercial generator under RCW 70.95.903, 81.77.140 36.58.160, and 35.21.158."</p>	<p>O-14-03</p> <p>This comment refers to an earlier version of the rule and is not directly related to proposed rule language. Ecology had already incorporated the commenter's requested change on an early draft of the rule, and the suggested language appears in the adopted rule.</p>

<p>[Commenter: O-14]</p>	
<p>O-14-06</p> <p>WRRRA has opposed exempt facilities and believes all solid waste handling facilities should be subject to permitting, inspection, reporting, and enforcement to protect human health and the environment, ensure real recycling, and the proper handling and disposal of solid waste. The changes here have the potential to go far beyond any exemption and offer a pathway for total deregulation under 173-350. Stakeholders require more information on the proposed scope of deregulation. WRRRA formally requests that DOE supply stakeholders with information regarding potentially effected entities in order to offer meaningful comments on the subject.</p> <p>[Commenter: O-14]</p>	<p>O-14-06</p> <p>Please see response to comment O-13-05 and comment O-14-1.</p>
<p>O-15-34</p> <p><i>WAC 173-350-320 & 410 Piles used for Storage or Treatment Inert Waste Landfills Comment Summary:</i></p> <p>Exempt facility and piles sections should have additional language in their respective tables explaining the interplay between these sections and the qualification for exemption under WAC 173-350 210.</p> <p>[Commenter: O-15]</p>	<p>O-15-34</p> <p>The interplay between sections of the rule is addressed in both the “applicability” and “permits and local ordinances” sections. Ecology added language to the rule in WAC 173-350-020(1) and WAC 173-350-700(1)(a) to make clear each section of the rule may be applicable, resulting in the possibility of the same facility having an exemption under one section of the rule and requiring a permit under another section. The language added in WAC 173-350-020(1) reads in part: "Facilities handling solid waste must comply with the standards of all applicable sections of this chapter." The language added in 700(1)(a) reads in part: "Facilities that meet the terms and conditions for exemption under one standard may require permitting for other non-exempt activities on-site. Facilities may operate under multiple exemptions from permitting if they meet all conditions for each section."</p>

	Ecology will consider developing guidance around this if needed.
<p>O-14-13</p> <p>WRRRA continues to oppose exempting facilities from solid waste oversight by DOE and Jurisdictional Health Departments (JHDs), which lack the resources to provide inspections without the support of permitting fees. Currently, exempt facilities lack any real oversight at the state and local level due to the exemptions, the management of the process and the lack of permitting fees to support inspections at the local level. The need for regulation and enforcement becomes even more apparent upon consideration of the possible environmental risks posed by these facilities, which go without inspection under the current system. The lack of inspection and oversight provides a haven for sham recyclers and threatens the integrity of Washington's solid waste system. When these facilities are walked away from by their operators, the taxpayers and rate payers bear their clean-up costs. WRRRA opposes exempt solid waste facilities.</p> <p>[Commenter: O-14]</p>	<p>O-14-13</p> <p>Comment noted.</p>
<p>O-15-17</p> <p>Second, the exemption process must be managed as a true process. Under the current system, and the current draft, the exemption process is still a "one-off" event whereby an entity files for an exemption, receives it with little to no investigation or debate, and is likely never looked at again. Maintaining an exemption should be an annual process and include, at a minimum, an initial inspection by the local by the local Jurisdictional Health Department (JHD), review of the operating plan, and periodic audits and verification of exempt facility records and reports. The current process, or lack thereof, is a proven failure and</p>	<p>O-15-17</p> <p>Please see response to comment O-13-05.</p>

<p>requires a robust and continuing process to maintain throughout the life of an exemption. The Department's authority to exempt facilities under RCW 70.95.305 does not provide for a one time process. The statute requires the Department to make certain determinations, the result of which may change over time, necessitating a true process to both qualify for and maintain an exemption. For over a decade these facilities have operated in a virtually deregulated environment and caused many problems for industry and local government alike. The pendulum now needs to swing the other way.</p> <p>[Commenter: O-15]</p>	
<p>O-15-18</p> <p>The new draft rule does make a number of positive changes to the exempt facility rules that should provide for better and easier enforcement, but still requires substantial accountability mechanisms. Requiring exempt facilities to file an operation plan 30 days prior to open and disclose the destination of materials they receive in their annual reports are much needed updates that should provide for some transparency and potential for enforcement.</p> <p>[Commenter: O-15]</p>	<p>O-15-18</p> <p>The conditions for permit exemption vary greatly based on facility type and the materials handled. For example, some facilities are required to submit annual reports, others are not.</p> <p>Please see response to comment O-13-05.</p>
<p>O-15-20</p> <p>These improvements are substantial but still leave one large hole in an effective enforcement regime, an actual boots-on-the-ground verification by local health that what is being reported is factual. This should include annual inspections and periodic audits of exempt facility records and reports. At a minimum, it must include an initial opening inspection and annual verification to <i>maintain</i> an exemption.</p>	<p>O-15-20</p> <p>Please see response to comment O-13-05.</p>

<p>[Commenter: O-15]</p>	
<p>O-14-15</p> <p>WAC 173-350-320 Piles Used for Storage or Treatment.</p> <p>The updates to the piles section represent a strong step in the right direction by requiring permits for most non-temporary piles and setting clear limits on time and volume allowed before a permit is required. WRRRA suggests DOE follow a similar model for other facilities and exemptions in 173-350. The approach laid out in this section is clear and avoids the ambiguity of the current 173-350-210 and 310 facilities, and allows for easy identification and classification of facilities; something which is greatly needed for stakeholders to understand the scope of changes to the rule. WRRRA questions why DOE has only found the approach taken here appropriate for piles and why it should not be applied to other sections along with more robust reporting requirements for input and output of material.</p> <p>[Commenter: O-14]</p>	<p>O-14-15</p> <p>Ecology believes the exemptions in WAC 173-350 sections -210, -310, and -320 use a consistent approach and require reporting in instances where there are throughput requirements.</p> <p>The commenter incorporated this comment by reference, but was received in response to an earlier draft of the rule. Ecology is not evaluating aspects of comments that require analysis of previous rule drafts.</p> <p>Ecology is pleased that the commenter supports the approach taken in WAC 173-350-320, Piles used for storage or treatment. The approach in each section evolved over time. Experience will show whether the approach taken in WAC 173-350-320 might somehow be adapted to improve performance under sections -210 and -310.</p>
<p>O-15-21</p> <p>Third, the updated rules draft and accompanying Responsive Summary do a good Job of describing what qualifies under the new individual material stream requirement for exempt facilities. However, the rule should specify examples of what would not qualify as an individual material stream, namely, construction, demolition, and land-clearing debris (CDL). Between the rule text and the Responsive Summary, individual material streams can consist of a box of only metal of one or several types, a mattress, or a hulk car. There are effective arguments for regarding each of these as an individual material stream. But as the level of abstraction increases from a</p>	<p>O-15-21</p> <p>During the initial implementation period of the adopted rule, Ecology will develop guidance regarding individual material streams versus comingled material streams.</p>

<p>box of pure raw material to a complex object like a hulk car, some specification as to what materials do not qualify as individual material streams becomes necessary. CDL should be chief among materials that do not qualify, and listed in rule, as it is a clear example of a mixed material stream and has proven to be associated with a class of facilities in dire need of stronger enforcement. This is also a reflection of existing law as CDL is specifically included in the statutory definition of solid waste RCW 70 95 030(22).</p> <p>[Commenter: O-15]</p>	
<p>O-15-23</p> <p>Finally, the new exemption for wood waste and concrete at the point of generation should be described in greater detail. Currently the rule dedicates only a few words in the table to this exemption and leaves a number of unanswered questions and no guidance for regulators on how to implement the rule.</p> <p>[Commenter: O-15]</p>	<p>O-15-23</p> <p>During the initial implementation period of the adopted rule, Ecology will further interpret and provide guidance on this exemption.</p>
<p>O-15-25</p> <p>Recycling and Material Recovery Facilities Comments Summary:</p> <p>Exempt facilities falling to fulfill the conditions of exemption must become permitted or cease operation if they fail to achieve compliance after 30 days.</p> <p>[Commenter: O-15]</p>	<p>O-15-25</p> <p>Please see response to comment B-16-05.</p>
<p>O-15-26</p>	<p>O-15-26</p> <p>Please see response to comment O-13-05.</p>

<p>Recycling and Material Recovery Facilities Comments Summary:</p> <p>The exemption process must be managed as a true process, including an initial inspection, audits, and reporting to maintain an exemption.</p> <p>[Commenter: O-15]</p>	
<p>O-15-27</p> <p>Recycling and Material Recovery Facilities Comments Summary:</p> <p>Clarification of what cannot qualify as individual material streams for exempt facilities are required in rule, especially for CDL</p> <p>[Commenter: O-15]</p>	<p>O-15-27</p> <p>Please see response to comment O-15-21.</p>
<p>O-15-29</p> <p>Recycling and Material Recovery Facilities Comments Summary:</p> <p>Exemption on wood waste and concrete at point of generation requires elaboration.</p> <p>[Commenter: O-15]</p>	<p>O-15-29</p> <p>Please see response to comment O-15-23.</p>
<p>O-16-02</p> <p>WAC 173-350-210 Recycling & 310 Intermediate Solid Waste Handling Facilities:</p> <p>WRRRA incorporates its original comments from our original comments and opposes exempt facilities. However, the WAC 173-350-310 draft revisions appear to take some positive steps and shrink the scope of the exemption. Going forward, it would be helpful to stakeholders if DOE could identify the facilities</p>	<p>O-16-02</p> <p>Please see response to comment O-15-15.</p>

<p>or entities that will be affected by this change in breadth of the exemption. DOE may also wish to draw from Seattle and King County's facility and certification rules which include more robust reporting requirements, regular inspections, clear classification of the materials they accept, and material diversion levels.</p> <p>[Commenter: O-16]</p>	
<p>O-14-07</p> <p>WAC 173-350-210 Recycling and Material Recovery Facilities and 173-350-310 Transfer Stations and Drop Box Facilities.</p> <p>A significant amount of solid waste handling activity in Washington already goes effectively unregulated under current DOE rules, due in part to a lack of enforcement on existing DOE laws and rules. This has opened the door to sham recyclers who hurt cities, counties, the state and legitimate lawful companies while exposing Washington citizens to unnecessary environmental risks. Washington's system has proven that regulation works for solid waste. All solid waste facilities, including MRFs, landfills, recycling facilities, and transfer stations in Washington should be subject to robust regulation with regular inspections and reporting requirements which document all materials received and what ultimately happens to the materials as part of a robust enforcement regime to ensure the integrity of Washington's excellent system.</p> <p>Permit exempt facilities, with lacking reporting and inspection requirements under WAC 173-350-210 & 310, have proven extremely problematic and provided a cover for cheap disposal operations. WRRRA opposed the exemption of solid waste facilities from permitting and inspection over a decade ago. Early on in the 173-350 rule update process, WRRRA identified exempt facilities as a key</p>	<p>O-14-07</p> <p>Please see response to comment O-13-05.</p>

<p>concerns for the industry. Despite this, neither a dedicated work group nor ongoing forum for discussion on this issue was included in the stakeholder process. WRRRA provided two sets of early comments which outline our concerns with the exemption process. We incorporate and reference that analysis here, but will not duplicate it and instead focus on newer sections of the rule.</p> <p>[Commenter: O-14]</p>	
<p>O-05-08</p> <p>The changes discussed above represent a good, but first step, towards effective enforcement of recycling facilities in Washington. The next step should include finally implementing the Transporter Law in 173-345, and annual inspections with periodic audits of facility records and reports. At a minimum, it must include an initial opening inspection and annual verification to maintain an exemption. Transporter Law requirements should also be referenced in the permit exemption table.</p> <p>[Commenter: O-05]</p>	<p>O-05-08</p> <p>Ecology agrees that Chapter 173-345 WAC should be properly implemented, and looks forward to discussing steps forward with WRRRA. In terms of incorporating reference to Chapter 173-345 WAC in Chapter 173-350 WAC, language was added in the exemption requirements under WAC 173-350-210(2), Table 210-A, items (2) and (3); and in WAC 173-350-300(2), On-site storage.</p>
<p>O-05-01</p> <p>WRRRA staff and members have participated in work groups and have submitted several sets of written comments on key sections of this rule update (First comments submitted December 1, 2015; second March 16, 2016; third September 6, 2016; and fourth February 9, 2017). We reiterate and incorporate all of those comments, but will not duplicate them here.</p> <p>[Commenter: O-05]</p>	<p>O-05-01</p> <p>Ecology acknowledges and appreciates the consistent participation of WRRRA in this rulemaking process. Ecology has included past comments as incorporated by WRRRA in this response to comments. Issues and solutions, as well as the approach and specific language in the rule have evolved over time. Ecology has tried to respond to overarching concerns reflected in previous comments, and to previous comments that are relevant and properly directed in the context of the proposed rule language.</p>

<p>B-10-11</p> <p>Comment 11: <u>The requirement for “all-weather roads” is unnecessary and unsupported.</u></p> <p>Throughout the proposed regulations, there are requirements for “all-weather” surfaces and roads (e.g., WAC 173-350-310(3)(a)(x)); however, there is no explanation why all-weather roads or surfaces are required in all circumstances. Presumably, this requirement is aimed at controlling discharges of stormwater, discharges to groundwater, or air emissions from dusty roads. Yet, there are already existing environmental regulations intended to provide these environmental protections. The impervious road requirement would, for example, be unnecessary for protecting stormwater discharges above benchmarks if the site has no off-site discharges or meets benchmarks with its existing stormwater management system. If there are no impacts from using non-impervious surfaces, what is the purpose for this requirement?</p> <p>[Commenter: B-10]</p>	<p>B-10-11</p> <p>The proposed rule defines "all-weather surface" as "...a road surface over which emergency vehicles and typical passenger vehicles can pass in all types of weather." This does not require such surfaces to be impervious. Some sections only require all-weather surfaces for roads used for public access areas of a facility. Reasons for requiring all-weather surfaces are to ensure that in the event an emergency response, responders can reach the affected facility or persons with minimal difficulty, and to facilitate the public being able to drive conventional private vehicles to publically-accessible areas such as transfer stations, drop boxes, and collection areas for recyclable materials or moderate risk waste.</p>
<p>O-08-02</p> <p>[Oral testimony] So, recently, the American Association of Plant and Food Control Officials have come up with a new definition for compost, which is a slight variation on the old one, and they spent years coming up with this. The new definition and I guess I'll go ahead and read it, compost is the product manufactured through the controlled aerobic biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which significantly reduces the viability of pathogens and weed seeds, and stabilizes the carbon such that it is beneficial to plant growth. Compost is typically</p>	<p>O-08-02</p> <p>WAC 173-350-100 has two definitions: "composted material" and "composting" which covers the information in the suggested revision (using one word "compost"). "Composted material" specifically describes the aerobic decomposition process that creates compost so neither biochar, digestate (made in an oxygen free process), nor would mulch (very little decomposition) qualify as composted material. The "Composting" definition also refers to controlled aerobic decomposition. Ecology believes the definitions in WAC 173-350-100 align with the commenter's suggestion, and chose not to modify compost-related definitions during this rulemaking.</p>

used as soil amendment but may also contribute plant nutrients.

So that's the end of their new definition, and the reason that they came up with this is because there was confusion between compost and other products. Like for example, biochar, and mulch, and anaerobic digestate. And I think, I'm not an expert on this, but it seems to me this is a good new definition. It's a little bit of a tweak on your existing definition in your rule, but it seems like it would be a good thing to be consistent with this sort of new national approach. And that's the end of my comment.

[Commenter: O-08]

<p>2. Definitions</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-14-02</p> <p><u>WAC 173-350-100 Definitions.</u></p> <p>“De minimis” The presence of man-made materials such as, but not limited to, paper, plastic, metal, and demolition debris that can reasonably be removed or may become a litter problem is not de minimis.</p> <p>Comment:</p> <p>We request Ecology use established definitions for de minimis.</p> <p>De minimis is defined by Merriam-Webster as; <i>lacking significance or importance: so minor as to merit disregard...</i></p> <p>Changing the definition for the purposes of this regulation may have significant unintended consequences. Specifying that paper or plastic that could be “reasonably” removed as not de minimis is counterproductive by setting an unclear standard</p> <p>Without setting a concentration relationship to an overall quantity this definition totally changes the meaning and intent of the word.</p> <p>An additional concern is the use of definitions by other agencies, particularly UTC, enforcing their rules. Such language may make moving a box of commercial recyclable C&D illegal if “de minimis”</p>	<p>B-14-02</p> <p>The definition of de minimis was written in the context of managing soils and dredged material and the term is used only where those materials are concerned for the definitions of "release" and "soil.” Ecology did consider more generic definitions such as those in Merriam-Webster, but chose to provide a definition to suit the specific need in this rule.</p> <p>Please see response to comment A-12-19.</p>

<p>amount of insulation is present. This definition should conform to existing definition.</p> <p>[Commenter: B-14]</p>	
<p>O-09-04</p> <p>Definition of cured concrete: The CR-102 uses an unsupported time period of 28 days and a compressive strength of 1200 psi to define cured concrete. We recommend adopting language similar to that found in the Sand and Gravel General Permit regarding unhardened concrete. Plus, we know of no ASTM standard test or other method to test the compressive strength of broken concrete. Therefore, we suggest the reference to compressive strength of 1200 psi be removed.</p> <p>[Commenter: O-09]</p>	<p>O-09-04</p> <p>Please see response to comment B-01-02.</p>
<p>A-18-01</p> <p>173-350-100 (Definitions) I'm just curious why "Agricultural Composting" was created/defined to distinguish it from "composting". Is agricultural composting different from "regular composting" or is it just to distinguish the fact that it is occurring on a farm. It kind of seems like this may refer to land applying crop residuals???? Does "agricultural composting" meet the requirement of NOT simply being the "natural decay of organic solid waste under uncontrolled conditions"?</p> <p>[Commenter: A-18]</p>	<p>A-18-01</p> <p>"Agricultural composting" means composting of agricultural waste as an integral component of a system designed to improve soil health and recycling agricultural wastes. Agricultural composting is conducted on lands used for farming." The Department of Ecology has not proposed any changes to this already existing definition. This definition supports the concept of composting agricultural wastes on-site (rather than burning, burying or sending to an off-site compost facility) and return of nutrients to the soil. Land application of solid waste requires a permit whereas agricultural composting, as described in WAC 173-350-220, Table 220-A, item (5), does not require a permit. Inclusion of the word "composting" in the term and in the definition indicates that a controlled conversion process is to be followed as opposed to the uncontrolled decay of organic residue.</p>

<p>A-18-02</p> <p>Crop Residues - I'm not sure I like the addition of "unprocessed produce from storage facilities". In my opinion this allows rotten onions, potatoes, etc. to be hauled back to the farm and land applied. This may be OK if the farm is a long ways from residential areas BUT if farm is somewhat close to residential areas foul odors could potentially be generated which will cause lots of complaints. I dealt with this scenario recently.</p> <p>I think this wording should be omitted OR have some sort of stipulation about where the unprocessed waste can go.....maybe only to compost facilities? In my opinion material that is typically coming out of storage is rotten or unworthy for sale in which case I think it becomes "solid waste" and should go to a permitted solid waste facility. Some material goes to feed lots...but even that is kind of questionable....because wherever it goes it will probably create odors.</p> <p>[Commenter: A-18]</p>	<p>A-18-02</p> <p>Ecology understands the concern about odors, but agricultural activities unfortunately produce odors from manure, herbicides, pesticides, fertilizers and other organic amendments. Ecology has had a policy and recommended to health departments that produce from storage be treated as crop residue, and to allow land application under the existing exclusion in WAC 173-350-020 for manure and crop residue applied at agronomic rates. The proposed change to the definition codifies existing policy. Ecology values the use of organic materials to improve agricultural soils and does not agree that such materials should be required to go to a solid waste facility.</p>
<p>B-01-02</p> <p><u>Definition of Cured Concrete (page 11).</u> The Agency is attempting to quantify the parameters which define cured concrete by adding an arbitrary time period of 28 days and invoking a compressive strength of 1200 psi. First, the selection of 28 days to define cured concrete is randomly selected and not germane. The Sand and Gravel General Permit (page 26) uses the term "unhardened" to account for fresh return concrete which has not solidified. The Agency should adopt similar language for this definition of Cured Concrete. Second, the ASTM test method for testing concrete for compressive strength (Method C39) relies of standard test cylinders made according to ASTM Standard C470. There <u>is no ASTM standard</u> test or other</p>	<p>B-01-02</p> <p>The definition of "cured concrete" in the adopted rule is:</p> <p>"Cured concrete" means concrete which has been produced from design mixtures specified to produce a twenty-eight-day unconfined compressive strength of no less than twelve hundred pounds per square inch and allowed to harden. Off-specification concrete which does not achieve this minimum strength value may be evaluated for consideration as a cured concrete by the solid waste permitting agency on a case-by-case basis. Cured concrete may also contain embedded steel, wood, or plastic materials used in the reinforcement or tensioning of concrete structural elements. For the purposes of solid waste handling under this chapter, other</p>

known method to test the compressive strength of piece of broken concrete. The language related to the compressive strength of 1200 psi should be removed from the definition of cured concrete as it is impossible to accurately ascertain this value. CalPortland is making this comment again as the language has not changed from the Preliminary Draft Permit.

[Commenter: B-01]

cementitious materials are not considered to be cured concrete.

Synopsis of Comments on the Definition

Numerous comments were received on this definition from representatives of the concrete, sand, gravel and aggregate and construction industries. Many of the comments focus on the proposed use of the twenty-eight-day unconfined compressive strength of no less than twelve hundred pounds per square inch, describing the specification as "randomly selected and not germane", "completely devoid of science", and "unsupported".

Several commenters mentioned the absence of testing methods that can be used to determine the compressive strength of broken concrete, and the need for guidance on the case-by-case acceptability of "off-specification" material for disposal in inert waste landfills.

A number of commenters also cite this specification as being irrelevant to the ability of concrete to be recycled through crushing and reuse of the crushed concrete as aggregate. One commenter asserts that the definition represents a potential conflict with other statutory objectives, specifically the mandate of RCW 70.95.805, requiring WSDOT and certain other agencies sponsoring transportation construction projects to use recycled concrete [endnote 1]. Another commenter states that the specification "has nothing to do with concrete's ability to be crushed and recycled", that "[c]oncrete that has a compressive strength of less than 1200 psi fully cures and has a marketable value", and that the provision regarding off-spec concrete "is highly subjective and will likely lead to increased quantities of materials being sent to solid waste landfills." A third commenter states "...a compressive strength of 1200 psi...is an arbitrary requirement. As long as the concrete is comprised of a mixture of sound sand and gravel mixed with cement, and/or fly ash the product can be recycled into a useful commodity".

Ecology's Rationale for the Compressive Strength Criterion

Ecology chose to establish a definition for "cured concrete" in the rule for two reasons. First, the term occurs in statute at RCW 70.95.065(2)(a), identifying "cured concrete" as among the "the types of solid wastes that are allowed to be received by inert waste landfills". There is a range of concrete [endnote 2] materials that may enter the solid waste system. Historically, Washington State's solid waste regulatory framework has identified a material as suitable for disposal in inert waste landfills if, among other characteristics, the material is likely to retain its physical and chemical structure under expected conditions of disposal. Ecology's experience indicates that some concrete materials do not possess that characteristic. Because RCW 70.95.065(2)(a) requires that the category of "cured concrete" be eligible to be received by inert waste landfills, Ecology sees a need to define the term and establish which concrete materials can be considered to be in that category.

Second, the term as used in the rule provides a means to differentiate between concrete materials with low mechanical strength and those with higher mechanical strength, as Ecology believes RCW 70.95.065 intends. Low-strength concrete material, usually referred to as controlled low-strength materials (CLSM), and also by terms such as jet grout, controlled density fill, or flowable fill, have been problematic in solid waste handling. Environmental issues have arisen due to the friable nature of CLSM and their potential to impact pH of surface and stormwaters and cause violations of water quality standards.

Consequently, Ecology sought a reasonable criterion to identify concrete material that meets Ecology's understanding of the intent of RCW 70.95.065, and to generally control the risks of violating water quality standards when a facility is storing waste concrete under WAC 173-350-320, or disposing of waste concrete under WAC 173-350-410. To that end, Ecology researched standards and

specifications commonly applied in the construction industry for concrete materials [endnote 3].

Our research found that a minimum compressive strength achieved after a particular number of days of curing is typically specified for concrete material to be used in construction projects. Ecology evaluated compressive strength criteria from the perspective of typical specifications for non-CLSM concrete mixes. To identify a typical approach to specifying concrete used in public works contracting for structural projects, Ecology reviewed WSDOT Standard Specifications. In the WSDOT 2016 Standard Specifications for structural concrete, the lowest identified compressive strength mix is 3,000 psi at 28 days, for both Class 3000 concrete and for commercial concrete.

Further, Ecology found that within the concrete industry, there is a threshold compressive strength below which the concrete mix design is typically deemed to CLSM. The National Ready Mixed Concrete Association's "Guide Specification for Controlled Low Strength Materials (CLSM)" states in Section 3.1 that CLSM is "[a] self-leveling and self-compacting, cementitious material with an unconfined compressive strength of 1,200 psi or less".

Based on this research, Ecology selected the specification of a minimum compressive strength of 1,200 pounds per square inch after 28 days as the reasonable strength criterion for the rule's definition of cured concrete.

In response to concerns expressed by stakeholders on the first preliminary draft of the rule, Ecology modified the definition of "cured concrete" so that the original specified concrete mix design compressive strength is the criterion of interest in determining if the waste concrete meets the definition of cured concrete. This is intended to avoid the issue of requiring testing of incoming waste concrete to demonstrate that, as received for

storage or disposal, it meets the compressive strength criterion.

Ecology acknowledges that for some demolition projects, documentation for all waste concrete material may not be available to substantiate the original specified concrete design mix compressive strength. To address this contingency, and also the potential for incidental concrete material intended for new construction, but which is rejected for use by a constructor and is diverted to a solid waste handling facility for storage or disposal, a provision for case-by-case evaluation of waste concrete as cured concrete by the solid waste permitting agency was added to the definition. Ecology's expectation here is that such material will be clearly differentiable from CLSM by the solid waste permitting agency. Ecology recognizes that evaluations of concrete materials under this provision involve judgment on the part of the solid waste permitting agency, possibly working in conjunction with Ecology solid waste technical assistance staff.

Ecology's Analysis of the Definition's Impacts on Recyclability of Waste Concrete

A basic premise of the proposed rule is that any material which an operator can make into a commodity or a finished product can be recycled. The definition for any particular material in the proposed rule does not bear on the status of the material as a commodity or finished product. However, the definition of any particular material in the rule may be relevant to the standards for handling the material. Ecology recognizes that the applicability of such standards may factor into the costs of a recycling process, and thus into the marketability of the recycled material.

However, most comments which link the definition of cured concrete and concrete's recyclability do not make an argument that the costs of compliance with handling standards in the proposed regulation are the basis for comment. Rather they suggest that the proposed definition's compressive strength criterion

is a factor that could in some unspecified manner result in the material being barred by regulation from being recycled. Ecology believes there is nothing in the proposed rule that supports this interpretation.

As noted in the discussion of rationale above, the term "cured concrete" is inextricably tied into the rule through statutory language regarding inert waste landfills. Further, a primary reason for including an explicit definition is to differentiate between cementitious materials with low mechanical strength such as CLSM, and higher-strength materials such as structural concrete. Experience has shown that while any cementitious material may present environmental management issues, the impacts of CLSM are generally more difficult to manage because its friable nature can result in ongoing exposure of fresh cement faces to interact with precipitation and cause pH impacts in runoff. While the regulatory use of "cured concrete" originates in a section of statute focusing on inert waste landfills, considerations of the differential environmental effects of CLSM and higher-strength concrete materials are also germane to concrete stored in piles and to concrete recycling facilities.

Within the proposed rule, the term "cured concrete" is used a total of twelve times, in four sections.

- In Section 100 – Definitions, the term is used once in the definition of "cementitious material", in explaining that cementitious material "means a material other than cured concrete containing Portland cement, fly ash, cement kiln dust, bottom ash, or other cement-like materials, used to add rigidity to soils during construction projects such as temporary retaining walls and shaft construction, or generated from construction or road maintenance projects." The term is also used four times in the definition of "cured concrete." It is used in the definition of "engineered soil" and "soil."

- In Section 210 – Recycling and material recovery facilities, the term is used twice in Table 210-A(1), which identifies terms and conditions for eligibility

	<p>for a permit exemption when handling particular groups of materials, with one group including cured concrete when comingled with asphalt and brick.</p> <ul style="list-style-type: none">• In Section 320 – Piles used for storage or treatment, the term is used twice in Table 320-A, which identifies terms and conditions for eligibility for a permit exemption when handling particular categories of materials, with two categories including cured concrete, once at (1) and another at (4).• In Section 410 – Inert waste landfills, the term is used once in (1)(a) to identify that the inert waste landfill standards apply to landfills that receive only a specific list of wastes, including cured concrete. <p>Of these occurrences, the most apparent connection between the definition of cured concrete and recycling of concrete is in WAC 173-350-210. However, cured concrete is of interest within WAC 173-350-210(2), Table 210-A item (2), only when cured concrete is comingled with asphalt and brick.</p> <p>If a recycling facility is managing concrete material, regardless of whether it is cured concrete, cementitious material, or a mixture of them, the material could be considered a source-separated recyclable material and the recycling activity would then be potentially eligible for exemption under the specific requirements of WAC 173-350-210(2), Table 210-A item (3). Storage of cementitious materials in enclosed structures at recycling facilities would typically not be expected to require a solid waste permit. However, the storage of cementitious materials in outdoor piles at recycling facilities would have to be permitted under WAC 173-35-320. This is an intentional choice in the rule, to ensure proper management of materials with a history of creating negative impacts to ground and surface waters if they are not correctly stored and handled.</p>
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Ecology believes that these scenarios should not represent a significant impediment to the ability of a facility operator to recycle concrete.

Endnote 1:

The text of RCW 70.95.805:

(1) The department of transportation and its implementation partners must collaboratively develop and establish objectives and strategies for the reuse and recycling of construction aggregate and recycled concrete materials. This process must include the development of criteria for the successful and sustainable long-term recycling of construction aggregate and recycled concrete materials in Washington state transportation, roadway, street, highway, and other transportation infrastructure projects.

(2) The department of transportation must, unless construction aggregate and recycled concrete materials are not readily available and cost-effective, specify and annually use a minimum of twenty-five percent construction aggregate and recycled concrete materials on its cumulative transportation, roadway, street, highway, and other transportation infrastructure projects.

(3)(a) All local governmental entities with a population of one hundred thousand residents or more must, as part of their contracting process, request and accept bids that include the use of construction aggregate and recycled concrete materials for each transportation, roadway, street, highway, or other transportation infrastructure project.

(b) Prior to awarding a contract for a transportation, roadway, street, highway, or other transportation infrastructure project, the local governmental entity must compare the lowest responsible bid proposing to use construction aggregate and recycled concrete materials with the lowest responsible bid not proposing to use construction aggregate and

recycled concrete materials, and award the contract to the bidder proposing to use the highest percentage of construction aggregate and recycled concrete materials if that bid is the same as, or less than, a bidder not proposing to use construction aggregate and recycled concrete materials or proposing to use a lower percentage of construction aggregate and recycled concrete materials.

(4) Any local governmental entity with a population of less than one hundred thousand residents must:

(a) Review and determine the capacity for recycling and reuse of construction aggregate and recycled concrete materials for roadway, street, highway, and other transportation infrastructure projects in its jurisdiction;

(b) Establish practical and applicable strategies to recycle and reuse construction aggregate and recycled concrete materials for roadway, street, highway, and other transportation infrastructure projects in its jurisdiction; and

(c) Upon the completion of the review and strategy development, begin implementing the strategies to achieve the recycling and reuse objectives established for its jurisdiction.

(5) The applications and related specification standards for state and local transportation and infrastructure projects that reuse and recycle construction aggregate and recycled concrete materials to be used in the implementation of this section are outlined in the department of transportation's standard specifications for road, bridge, and municipal construction, section 9-03.21, table 9-03.21(1)E.

(6) The definitions in this subsection apply throughout this section unless the context clearly requires otherwise.

(a) "Construction aggregate and recycled concrete materials" means reclaimed coarse and fine

aggregate cement and concrete mixtures as commonly defined by the American public works association, the federal highway administration, and department of transportation specifications.

(b) "Implementation partners" means local governmental entities and interested Washington-based associations representing the appropriate sectors of the construction industry.

(c) "Local governmental entities" means cities or counties.

Endnote2:

For the purposes of this discussion, "concrete" is being used as a general term to mean a hardened mixture of cements, supplementary cementing materials, aggregates, chemical admixtures, water and air, without regard to strength or curing time. The proposed rule's definitions of "cementitious materials" and "cured concrete" are intended to describe particular categories of concrete.

Endnote 3:

Ecology notes that at Section 990(2)(a) of the adopted regulation, one of the listed inert wastes is "[c]ured concrete that has been used for structural and construction purposes...". Ecology believes that a qualifying requirement for waste concrete to have been used for structural and construction purposes, which does not appear in the statutory language, does not contribute in a meaningful way to the meaning of "cured concrete" for the purposes of the proposed rule. Indeed, in the first preliminary draft, the proposed definition included the requirement of structural use (but not construction use) in establishing the meaning of "cured concrete". In response to stakeholder comment questioning the utility of a blanket qualifying requirement of structural use in how cured concrete may be handled as a solid waste, Ecology removed the structural use

	<p>requirement from the definition of "cured concrete" in subsequent revisions of the proposed rule.</p>
<p>B-11-02</p> <p>"Cured Concrete - means concrete which has been produced from design mixtures specified to produce a 28-day unconfined compressive strength of no less than 1200 pounds per square inch, formed into structural elements, and allowed to harden." For the purposes of solid waste handling in inert waste landfill ... cementitious materials are not considered to be cured concrete." This proposed definition imposes standards that are completely devoid of science. The 28-day curing timeline has been arbitrarily selected by DOE and applied to what can be considered "cured concrete." This time period relates to the ASTM method for testing compressive strength, is has nothing to do with concrete's ability to be crushed and recycled, nor any impact(s) to the environment. The same is true with DOE's selection of 1200 psi. Concrete that has a compressive strength of less than 1200 psi fully cures and has a marketable value. The second draft includes a revision that partially resolves the concern for recycling off-spec concrete, but this requires a case-by-case determination by the "solid waste permitting agency". This provision is highly subjective and will likely lead to increased quantities of materials being sent to solid waste landfills. The draft also adds a provision that concrete must be "formed into structural elements" in order to be considered cured. This too is highly ambiguous and unnecessary. Does a hardened pile of concrete fit the definition of "formed into structural elements," or does concrete literally have to be "formed" to be considered a cured material? The agency needs to reconsider the definition and CPM suggests the definition includes <i>[original comment as submitted concludes here]</i></p> <p>[Commenter: B-11]</p>	<p>B-11-02</p> <p>Please see response to comment B-01-02.</p>

<p>A-12-14</p> <p>WAC 173-350-100 “Wood derived fuel”</p> <p>Is creosote still considered appropriate for wood derived fuel? Seems like perhaps that should be struck.</p> <p>[Commenter: A-12]</p>	<p>A-12-14</p> <p>Creosote treated wood remains appropriate as an element of "wood derived fuel" for purposes of implementing this chapter. Its combustion in an energy recovery unit requires approval by the air permitting authority with jurisdiction. Its use as a fuel is conditionally allowed in the state dangerous waste regulations, WAC 173-303-071(3)(g)(ii) and in this rule, WAC 173-350-240 Table 240-A(1). The combustion unit operator is obligated to ensure that use of creosote treated wood that meets the definition of "wood derived fuel" in Chapter 173-350 WAC complies with the federal requirements.</p>
<p>A-12-19</p> <p>WAC 173-350-100 "De minimis" This definition does not speak to what constitutes a de minimis release. The definition of release, however, alludes to a de minimis release. Expand this definition to elaborate on a de minimis release.</p> <p>[Commenter: A-12]</p>	<p>A-12-19</p> <p>De minimis is used: 1) To decide whether an impact to soil constitutes a release that may warrant management of the soil as contaminated. Adding de minimis to "release" acknowledges that most excavation projects or construction sites will have minor equipment leaks, paint residue from marking a site, etc., but that should not warrant management as a contaminated soil. 2) To determine whether an ostensible soil should be subject to the parts of the rule that govern soils, or contains so many other materials (e.g. construction debris, land clearing waste) that it should be managed as solid waste subject to other parts of the rule. Adding de minimis to "soil" acknowledges that many soil excavation projects will have incidental bits of concrete, land clearing remnants, etc. but that it should still be managed as soil. The term has been defined for these specific concepts.</p>
<p>A-12-13</p> <p>WAC 173-350-100 “Inert Waste Landfill”</p> <p>This definition was removed. Is this not a term that will be used anymore by Ecology? It is used in the definition of “Limited Purpose Landfill”. Does that mean the</p>	<p>A-12-13</p> <p>The “definition” of an inert waste landfill is embodied in the applicability section of the inert waste landfills section of the rule, WAC 173-350-410(1):</p> <p>These standards apply to landfills that receive only the following types of solid waste if the</p>

<p>definition of Inert Waste Landfill needs to stay?</p> <p>[Commenter: A-12]</p>	<p>waste has not been tainted, through exposure from chemical, physical, biological, or radiological substances, such that it presents a threat to human health or the environment greater than that inherent to the material:</p> <p>(a) Cured concrete;</p> <p>(b) Asphaltic materials;</p> <p>(c) Brick and masonry;</p> <p>(d) Ceramic materials produced from fired clay or porcelain;</p> <p>(e) Glass; and</p> <p>(f) Stainless steel and aluminum.</p> <p>A definition of “inert waste landfill” would only serve the purpose of describing what wastes can go into a facility under WAC 173-350-410. Since the relevant information is included in WAC 173-350-410, a separate definition was not added in WAC 173-350-100.</p>
<p>B-07-01</p> <p>Definition of Cured Concrete (WAC 173-350-100)</p> <ul style="list-style-type: none"> The proposed definition extremely complex and appears to be developed with the intention of limit materials containing cement being treated as concrete. The definition needs to be more descriptive of the material in a meaningful way. How are material handlers going to determine the engineering specifications, such as a 28 day design strength which has an ASTM spec, for material coming into a facility? What 	<p>B-07-01</p> <p>Please see response to comment B-01-02.</p>

<p>testing standard do we use to determine compliance?</p> <ul style="list-style-type: none"> • Miles Recommends the following definition change: <ul style="list-style-type: none"> ○ Cured Concrete: hardened material primarily composed of processed aggregate, sand, cement and/or fly ash that has undergone hydration. <p>[Commenter: B-07]</p>	
<p>B-12-01</p> <p>We at Miles Sand & Gravel appreciate the efforts that Ecology has taken in the revisions to the Solid Waste Handling Standards, WAC 173-350. With any task as large and complex, as this has been, there will always be concurrences and difference of opinions. With this in mind, following are our comments:</p> <p>173-350-100 Definitions; Cured Concrete</p> <p>Ecology has used terms which relate to the Design Compressive Strength of a cement concrete mix. The twenty-eight-days refers to the number of days the mix will take to reach a required strength. There are several different design mixes which are designed to reach a specified strength in 3, 8, 14, etc. days. While the 28 days used is a common mix it should not be used in this definition. There is not a good way to determine if the hardened concrete being accepted at a recycle site has been produced from design mixtures of 3, 14 or 28 day design. The definition also includes that the concrete must have a compressive strength of 1200 psi. This again is an arbitrary requirement. As long as the concrete is comprised of a mixture of sound sand and gravel mixed with cement, and/or fly ash the product can be recycled into a useful commodity. We recommend that the</p>	<p>B-12-01</p> <p>Please see response to comment B-01-02.</p>

<p>definition of Cured concrete be changed to read: Cured concrete; Hardened, nonfluid material composed of processed sand and gravel, cement and/or fly ash that has undergone hydration.</p> <p>[Commenter: B-12]</p>	
<p>B-12-02</p> <p>We recommend that Asphalt shingles be added to the definitions. The use of the proper roofing material (RAS) within asphalt concrete mixes has become a very beneficial means to reduce the roofing being hauled to landfills. We are not including modified bitumen, tar products, built-up hot mop or cold mop roofing, rolled roofing, or other types of non-asphalt roofing within our suggested definition. Our suggested definition is as follows:</p> <p>Asphalt singles; A type of wall or roofing shingle, including 1-2-/3-tab, architectural and dimensional shingles, that are produced from asphalt, fiber (commonly fiberglass or cellulose), and surface granules of stone, ceramic, brick, or other materials.</p> <p>[Commenter: B-12]</p>	<p>B-12-02</p> <p>Please see response to comment A-21-02</p>
<p>O-04-02</p> <p>Finally, mention of "wood waste and "wood derived fuels" shows up in WAC 173-350-240 and - 320. We appreciate that in the second response to comments document Ecology clarified that hogged fuel is not a solid waste but request that this clarification be carried into the rule language itself. We also request that it be clarified in 173-350-100 that the distinction between "wood waste" and "hogged fuel" is that wood waste is biomass that is discarded, abandoned or disposed of. Sawdust, chips, shavings, and bark, to name a few, are valuable commodities. They are not routinely discarded,</p>	<p>O-04-02</p> <p>Removal of "hogged fuel" from the definition is not intended to suggest that all materials remaining in the definition are automatically classified as solid waste. Ecology recognizes that some materials are managed as legitimate commodities with positive market value. A reference to WAC 173-350-021 has been added to the "wood waste" definition. This should make clear that a process exists to determine if the materials remaining as examples in the definition are being managed as valuable materials or solid waste. The initial removal of hogged fuel from the definition was intended to support previous conclusions that hogged fuel is typically managed</p>

<p>abandoned or disposed of in our industrial practices.</p> <p>[Commenter: O-04]</p>	<p>as a commodity. Its inclusion in the "wood waste" definition has generated confusion in the past and its removal from the definition was intended to help eliminate the confusion.</p>
<p>B-09-04</p> <p>In the world of hazardous waste management, hazardous waste (and/or dangerous waste) is a subset of solid waste. However, the various definitions and applicability examples do not seem to have any utility in WAC 173-303. The definition of solid waste in WAC 173-350-100 is significantly different than the definition in WAC 173-303-016(3).</p> <p>Ecology should consider aligning these two definitions for utility in either rule. By not doing so, generators and facilities have two complex sets of definitions to analyze in order to determine how their waste should be managed. Nucor believes that the definition in updated WAC 173- 350-100, which excludes explicit references to slag, is the more accurate definition given the recent statutory exemption of electric-arc-furnace slag from solid waste regulations. At the very least, the starting point should be the same and that is whether the waste is a solid waste and if the rest of the chapter applies.</p> <p>[Commenter: B-09]</p>	<p>B-09-04</p> <p>Ecology must work within the statutory definition of solid waste passed by the legislature, contained in RCW 70.95.030, and has no authority to change it. Additionally, the definition of solid waste in the Dangerous Waste regulation only applies to those solid materials which are also dangerous or hazardous wastes.</p>
<p>A-07-05</p> <p>WAC 173-350-100 Definition for "Manure and bedding" needs to include pet waste if indeed it is to be considered an organic material for composting with a current facility in Pierce County. Also, the testing required may not cover testing for the zoonotic diseases needed to be under consideration for pet waste.</p>	<p>A-07-05</p> <p>Dog and cat pet waste is deliberately omitted from the definition of "manure and bedding". As the term "manure and bedding" is used in the chapter, inclusion of dog and cat pet waste is not appropriate. Use of the term "manure and bedding is limited to WAC 173-350-220, Composting facilities, and WAC 173-350-225, Other organic material handling activities, which are not within the scope of this rule revision, and WAC 173-350-</p>

<p>[Commenter: A-07]</p>	<p>230, Land application. Development of the quality standards in the sections referenced did not contemplate pet waste from dogs and cats. Ecology conducted a limited study of the facility the commenter references and concluded that, while concerns for potential presence of zoonotic organisms persists, screened finished compost was meeting the existing quality standards of WAC 173-350-220.</p>
<p>A-16-03</p> <p>-100 "agricultural waste". The change from "on" to "from" allows persons with wastes generated at a farm to transport anywhere. We see this with farms advertising "compost", manure, or topsoil that has not been through any pathogen reduction process.</p> <p>[Commenter: A-16]</p>	<p>A-16-03</p> <p>The rule does not govern transportation of agricultural waste. The change was made to acknowledge that for practices such as pile storage and composting under conditional exemptions, agricultural waste can be moved and managed at different farms than where it may have originated. Ecology understands there are farmers distributing compost that may not meet regulatory standards. The practice is not condoned and resolving such issues is a matter of compliance and enforcement. For manure, the rule provides no pathogen reduction process outside of composting. Topsoil is likely clean soil, which is not solid waste governed by this rule.</p>
<p>A-16-09</p> <p>-100 "point of compliance". The last sentence makes this especially helpful in establishing and reinforcing that there are points in a process that have to meet compliance, like PFRP, an air standard, etc.</p> <p>[Commenter: A-16]</p>	<p>A-16-09</p> <p>Comment noted.</p>
<p>A-16-06</p> <p>-100 "indoor storage". This is a great help. It would be more helpful if stated thus; a structure where roof and walls exclude precipitation to protect solid waste. Many sites have roofs or</p>	<p>A-16-06</p> <p>Ecology believes that the inclusion of "that protect solid waste from precipitation," is sufficient. If precipitation is reaching the solid waste, the structure is not being protective of solid waste and</p>

<p>hoop houses attached to ecology blocks that don't meet the roof.</p> <p>[Commenter: A-16]</p>	<p>the health department would have the authority to take action.</p>
<p>A-16-05</p> <p>-100 "comingled recyclable materials". This is a helpful definition along with the already existing "source separated" to help businesses identify and define materials.</p> <p>[Commenter: A-16]</p>	<p>A-16-05</p> <p>Comment noted.</p>
<p>A-16-08</p> <p>-100 "manufactured topsoil". Change wording on third sentence to: "Manufactured topsoils may not contain solid waste such as but not limited to laminate, plastic, or asphalt shingles. Material containing such waste are not manufactured topsoil and are subject to management under this chapter."</p> <p>[Commenter: A-16]</p>	<p>A-16-08</p> <p>Based on another comment, Ecology added "yard debris" to the third sentence, before "laminate." Since yard debris, and potentially other organic solid wastes, could be used to produce a manufactured topsoil, the structure of the existing third sentence works best and still states that inclusion of such materials is subject to management under this chapter.</p>
<p>A-06-07</p> <p>"Lower explosive limit" – The TPCHD recommends improving the clarity by removing the words "below" and "does not" from the proposed definition. Therefore, the definition should read "the minimum concentration of vapor in air which propagation of a flame occurs in the presence of an ignition source."</p> <p>[Commenter: A-06]</p>	<p>A-06-07</p> <p>The definition for "lower explosive limit" in the previous version of the rule was duplicated from Chapter 173-351WAC, Criteria for Municipal Solid Waste Landfills. This duplication was intended to provide consistency between the different state regulations for landfills which might require gas control and its associated compliance criteria. Chapter 173-351 WAC derived its definition from the MSW landfill criteria of 40 CFR 258, which supports the federal municipal solid waste landfill permit program. In view of the value in maintaining consistency across the federal and state solid waste regulations, Ecology withdrew the proposed change</p>

	to the definition, and included the previous definition without modification.
<p>A-06-06</p> <p>6) “Inert Waste” and “Inert Waste Landfill” – These definitions were removed from the proposed version of the rule. The TPCHD recommends that these definitions remain in the definition section of the rule.</p> <p>[Commenter: A-06]</p>	<p>A-06-06</p> <p>Please see response to comment A-12-13.</p>
<p>A-06-10</p> <p>“Tip floor” or “Tipping Floor” – These words are used in Sections -210 and -310 of the rule and, therefore, need inclusion as a definition. The TPCHD recommends that the definition of “tip floor” (or “tipping floor”) includes all areas of collection, staging, and receiving for incoming waste at a solid waste handling unit.</p> <p>[Commenter: A-06]</p>	<p>A-06-10</p> <p>Ecology added a definition of "tipping floor" to the rule to clarify that all incoming material needs to be received in an enclosed area and not outdoors.</p> <p>Ecology also changed the language to include ancillary areas where leachate may be generated. Tipping floors or receiving areas do not include tipping directly into drop boxes, nor do they include trailer areas.</p>
<p>A-06-04</p> <p>“Detachable containers” – The TPCHD recommends that the definition include transfer trailers and transfer containers for clarity. See TPCHD Comment #15 under Section -300 for context.</p> <p>[Commenter: A-06]</p>	<p>A-06-04</p> <p>The definition of "Detachable containers" was not amended to include transfer containers. The regulatory use of the term "detachable container" is limited to WAC 173-350-310 (transfer stations and drop boxes) and WAC 173-350-300(2) (on-site storage, collection, and transportation standards). The term is not used for collection and transportation activities, which is the subject of the comment pertaining to potentially leaking waste hauling containers.</p> <p>Please see response to comment A-06-14.</p>

<p>A-06-09</p> <p>“New solid waste handling unit” – The term “significant modifications” is used in this definition.</p> <p>The rule should incorporate the definition of “Significant modifications” in the definition section of the rule. The TPCHD would appreciate if the department could provide jurisdictional health departments (during rule implementation training) with some common examples when such significant modifications would trigger solid waste permitting modifications.</p> <p>[Commenter: A-06]</p>	<p>A-06-09</p> <p>The term “new solid waste handling unit” is used only in the context of effective dates for when a unit must meet the new standards of the adopted rule. Ecology expects existing units undergoing “significant” changes, such as redesign, to meet the new standards immediately. Those undergoing “minor changes,” such as an update to the plan of operation, can meet the new standards by the timelines associated with existing units. Leaving “significant” undefined allows flexibility for JHDs to determine whether a standard should be met immediately or not. Ecology will provide guidance during rule implementation training.</p>
<p>B-04-04</p> <p><u>WAC 173-350-100 Definition of "Source Separation"</u></p> <p>"Source separation" of materials for reutilization or disposal is a common activity at Boeing and other businesses in Washington. Source separation activities occur on shop floors (including separating FRCM from other secondary materials generated by aerospace manufacturing processes), as well as offices and cafeterias, where employees regularly place different materials in different collection bins, some destined for reuse, some for recycling, and some for landfilling. Boeing has never considered the act of sorting at the point of generation to be a regulated solid waste handling activity, and we do not believe that Ecology has either (as confirmed during the March 9th 2018 Q&A session preceding the public hearing on the proposed revisions).</p>	<p>B-04-04</p> <p>As defined in WAC 173-350-100, “source separation” is onsite handling of the generator's own waste where the waste originates. It is solid waste handling, but no permitting is required.</p> <p>When performed by a business it is subject only to WAC 173-350-300 Onsite storage, collection, and transportation standards: "These standards apply to the temporary storage of solid waste in a container at a premises, business establishment, or industry and the collecting and transporting of the solid waste."</p>

<p>To make the regulatory language clear that source separation activities are not regulated, Boeing requests the following addition to the definition of “source separation” in WAC 173-350-100:</p> <p>”Source separation’ means the separation of different kinds of solid waste at the place where the waste originates. <u>Source separation is not a solid waste handling activity.</u></p> <p>While, with this clarification, this is a useful definition, it should be noted that the term "source separation" is not used anywhere else in the proposed rule or existing regulations. Something similar, (i.e., "separation") is used in the definition of "reuse," resulting in an ambiguity that needs to be remedied in the final rule, as suggested immediately below.</p> <p>[Commenter: B-04]</p>	
<p>B-04-05</p> <p><u>WAC 173-350-100 Definition of “Reuse” and Inappropriate References to Regulations</u></p> <p>Definition of "reuse" – clarify that source separation of reusable materials is not a solid waste handling activity</p> <p>The proposed term “reuse” is defined as follows:</p> <p>”Reuse’ means using an object or material again, either for its original purpose or for a similar purpose, without significantly altering the physical form of the object or</p>	<p>B-04-05</p> <p>Please see response to comment B-04-04.</p> <p>Source separation is only regulated by WAC 173-350-300, On-site storage, collection, and transportation standards, so no change is necessary to the definition of reuse.</p> <p>Ecology believes the inclusion of the word “reuse” in the following definitions is warranted:</p> <p>“Active area,” refers to the area of a facility where solid waste handling occurs. The determination of solid waste in WAC 173-350-021 relies in part on the potential storage of items for reuse that have no</p>

material. Reuse is not solid waste handling, ***but separating materials from other solid wastes for reuse is a solid waste handling activity.*** Use of solid waste as fill or alternative daily cover is not reuse.” (emphasis added)

Boeing supports the principle that reuse should be encouraged and not subject to the solid waste handling regulations. It is unclear why the italicized phrase above in bold is included in the definition of reuse, especially since "source separation" (whether for reuse or disposal) is not a solid waste handling activity.

In order to assure that "source separation" of reusable materials is not regulated as solid waste handling, the proposed definition of “reuse” should be changed to either: (a) entirely delete the phrase "but separating materials from other solid wastes for reuse is a solid waste handling activity"; or (b) clearly indicate that "source separation" is not a solid waste handling activity, as follows:

“**Reuse**’ means using an object or material again, either for its original purpose or for a similar purpose, without significantly altering the physical form of the object or material. Reuse is not a solid waste handling activity, but separating materials from other solid wastes for reuse (other than source separation as defined in WAC 173-350-100) is a solid waste handling activity. Use of solid waste as fill or alternative daily cover is not reuse.”

References to Reuse in Other Provisions of the Regulations

market value. Therefore, “reuse” needs to be included in the definition.

“Processing” refers to the act of preparing something for reuse, not the actual reuse of the item, so the use of “reuse” in the definition is appropriate.

The definition of “recyclable materials” in RCW 70.95.030 includes the term “reuse” and cannot be changed through rule.

<p>The term "reuse" is used throughout the proposed rule, but, because reuse is not a solid waste handling activity, its use in the WAC 173-350-100 definitions of "active area," "processing," and "recyclable materials" appears to be out of place. In these cases the definitions describe a regulated activity or material. Including reuse, which is not a solid waste handling activity, causes confusion. The term "reuse" should be struck in these three definitions.</p> <p>[Commenter: B-04]</p>	
<p>O-12-03</p> <p>Definition of Cured Concrete:</p> <p>We provided the following comments in the Preliminary Draft permit with regard to this unworkable and not viable definition. In our August 2016 comments we said;</p> <p><i>Definition of Cured Concrete – P. 23. The Agency has produced arbitrary and capricious standards by which a "cured" concrete material can be evaluated. As written, there is no logical consideration of the material in a hardened state. I suspect the Dept. has subjectively tried to determine the distinction between a slurry material (IE: jet grout) versus what has been referred to a "cured structural" material. The dept. misses its mark in this effort. Regardless of psi (an arbitrary measure) all these materials are valuable recyclable materials. Not all concrete is tested in the field so the information is either not obtainable nor is it tested for psi in a broken conditions. Concrete will continue to gain strength while moisture</i></p>	<p>O-12-03</p> <p>Please see response to comment B-01-02.</p>

is present so even less than 1200 psi material will qualify if given the time. We recommend this section be deleted, as it has no basis in logic as written.

Our comments remain the same for the formal draft. *No test exists to be able to measure or qualify a response to the request, making this condition essentially meaningless.* If a jurisdiction were to ask for substantiation that a given broken concrete material had achieved the 1200-psi at a 28-day stage *we cannot comply.* This may be an attempt to establish a baseline condition. Regardless, we can't prove what we can't demonstrate. This puts our industry and members in unnecessary jeopardy and risk to third party liability of non-compliance with a jurisdiction. This same concern and jeopardy, risk and exposure would extend to WSDOT, Ports, Cities and Counties, AGC and other construction companies.

With the extensive work we have done with the WQ group on the S&G and CSWP NPDES permits, it is likely there is an opportunity to provide consistency between the two documents and or determine an acceptable industry measurement that may apply once we better understand what you are chasing.

Given the inability of industry to meet this requirement, we strongly urge you to remove the language as proposed. We would be happy to work with you on alternative language.

[Commenter: O-12]

<p>O-15-41</p> <p>Fourth, WRRRA continues to object to changes in the definition of solid waste in WAC 173-350-100 to accommodate contaminated soils. Contaminated soils are already contained within the statutory definition of solid waste in RCW 70.95 and the rule definition in WAC 173-350. This change is unnecessary and confusing. The term "impacted soils" is ambiguous and lacks clear meaning to a casual observer. The rule section and definitions should proceed with the existing and self-evident definitional term "contaminated soil."</p> <p>[Commenter: O-15]</p>	<p>O-15-41</p> <p>Please see response to comment O-16-08.</p>
<p>O-15-47</p> <p>Sediment Criteria and Use Comments Summary:</p> <p>Changes to the definition of solid waste to accommodate contaminated soils are unnecessary and disingenuous.</p> <p>[Commenter: O-15]</p>	<p>O-15-47</p> <p>Please see response to O-16-08.</p>
<p>O-15-48</p> <p>Soil and Sediment Criteria and Use Comments Summary:</p> <p>Contaminated soils are solid waste and cannot be exempted by rule.</p> <p>[Commenter: O-15]</p>	<p>O-15-48</p> <p>Please see response to comment O-16-08.</p>
<p>O-14-04</p> <p>WRRRA was heavily involved in the work group that developed this test and notes that a key</p>	<p>O-14-04</p> <p>As separation is a common term, and may be used in a variety of ways depending on context, (source-</p>

<p>definition developed in that process and relevant to this section has been omitted. In 173-350-110(3)(b) the test specifies that a material must be separated from other solid wastes, though the extent or type of separation is not specified. Early drafts of this rule section from the work group process, particularly the draft dated 12-30-15 clarified this section by proposing a definition for "separation." WRAA recommends adopting the 2-25-15 definition of "separation" with one edit:</p> <p>"Separation" or "separated" means source-separation or other processing to substantially remove or separate recyclable materials from other non-recyclable solid waste, resulting in less than 10% by weight non-recyclable materials, for the purpose of reuse or recycling.</p> <p>Defining "separation" provides needed clarity, supports existing regulation, and should be incorporated into the more recent drafts as the term "separated" is ambiguous standing alone. This definition also supports and highlights the crucial statutory provision, source separation of recyclable materials.</p> <p><i>[Comment included a footnote: RCW 70.95.010(5) "Source separation of waste must become a fundamental strategy of solid waste management. Collection and handling strategies should have, as an ultimate goal, the source separation of all materials with resource value or environmental hazard."]</i></p> <p>[Commenter: O-14]</p>	<p>separation versus separation of recyclable material streams at a material recovery facility) Ecology does not feel the need to define the term narrowly in these regulations. The definition the commenter proposed would de facto force most curbside material recovery facilities (MRFs) to be classified as transfer stations, due to accepting both comingled material and handling material with double-digit contamination. Such a move is not in keeping with the intent of Chapter 70.95 RCW.</p>
<p>O-15-02</p> <p>First, the test needs to define "separation" in a manner consistent with other rule sections. WAC 173-350-021(3)(b) states that a material is no longer a waste if, among other factors, it is "separated from solid wastes." Essentially, the test specifies that a material must be "separated"</p>	<p>O-15-02</p> <p>Please see response to comment O-14-04.</p>

from other solid wastes, though the extent or type of separation is not specified. Utilities and Transportation Commission (UTC) statutes and rules also lack a definition of separation and the lack of clarity on this issue has raised significant questions in the past. Obviously, a box containing only clean wood save for several old bent rusty nails inadvertently sitting at the bottom of the box should not fail this prong of the test. Similarly, the same box full of excess drywall and other debris should fail this portion of the test. Providing a definition of "separation" that aligns with other rule sections and the spirit of the determination of waste test will provide needed clarity.

WRRRA was heavily involved in the work group that developed this section, and earlier versions *did* define separation. This crucial definition has been omitted from both informal drafts of the rule. The draft test dated 2-25-15 clarified this section by proposing a definition for "separation." WRRRA recommends adopting the 2-25-15 definition of "separation" with several edits to bring it into line with the new WAC 173-350-210 facilities sections.

"Separation" or "separated" means source-separation into individual material streams to remove or separate recyclable materials from other non-recyclable solid waste, resulting in less than 5% by weight non-recyclable materials, for the purpose of reuse or recycling.

Defining "separation" provides needed clarity, supports existing regulation, and should be incorporated into the final rule. The definition above was heavily discussed and vetted by the stakeholder work group. The term "separated" is ambiguous standing alone. This definition also supports and highlights the crucial statutory provision, source separation of recyclable materials.

[Comment included a footnote: RCW 70.95.010(5) Source separation of waste must

<p><i>become a fundamental strategy of solid waste management. Collection and handling strategies should have as an ultimate goal the source separation of all materials with resource value or environmental hazard.]</i></p> <p>[Commenter: O-15]</p>	
<p>O-15-05</p> <p>Third, changes to the definition of "recycling" and the addition of "commodity" to WAC 173-350 should receive more scrutiny. Department staff has indicated that some changes to the definition of recycling have been poorly received and misunderstood, particularly:</p> <p>"Recycling does not include crushing, shredding, compacting, sorting, baling, or repackaging when those activities are part of collection, intermediate processing, or preparation for the purpose of transport."</p> <p>This language has caused confusion because the act of recycling usually incorporates some or all of these elements. Our understanding is that Department staff intended to indicate that something more than mere preparation for transport is required for a material to be recycled. The language above is confusing and should be revised, but the original intent behind the language should be preserved. Maintaining this distinction between mere preparation and true transformation into something of value is crucial for the new "commodity" definition to have any real meaning.</p> <p>[Commenter: O-15]</p>	<p>O-15-05</p> <p>Please see response to comment O-05-04.</p>
<p>O-15-10</p> <p>Applicability and Determination of Waste Comments Summary</p>	<p>O-15-10</p> <p>Please see response to comment O-14-04.</p>

<p>The term "separated" is used in the determination of waste test but not defined. "Separation" should be defined and included in the rule, specifying source - separation and the "5% rule" to align the definition with the facilities section updates.</p> <p>[Commenter: O-15]</p>	
<p>O-15-12</p> <p>Applicability and Determination of Waste Comments Summary</p> <p>The definition of recycling in the draft rule should be revised to prevent confusion, but still specify that a true transformation into something of value is required for a material to be recycled.</p> <p>[Commenter: O-15]</p>	<p>O-15-12</p> <p>Please see response to comment O-05-04.</p>
<p>O-05-04</p> <p>Definition of Recycling: WRRRA appreciates changes to clarify the definition of recycling by deleting proposed new language from the previous draft of this rule. However, the latest proposal loses an important distinction by deleting the sentence "recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport." The definition of recycling in the final rule should read:</p> <p>"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of</p>	<p>O-05-04</p> <p>With the addition of commodities to the types of recycled products, the line between recycling and material recovery has become less distinct, it is true, but not all processing at material recovery facilities will create commodities. Ecology sees a distinct line between processing only for transport and processing to meet commodity specifications, but stakeholders in the last round of comments found the sentence referenced by the commenter confusing. Many said it made it seem that commodities could not be made at material recovery facilities, and of course, that is primarily where commodities will be made. In response, Ecology removed the language, "does not include collection, compacting, repackaging, and sorting for the purpose of transport" from the definition of "recycling." The second sentence of the definition reads, "Recycling includes processing waste materials to produce tangible commodities."</p>

<p>transport. Recycling includes processing waste materials to produce tangible commodities.</p> <p>Maintaining the distinction between mere preparation and true transformation into something of value is crucial for the new “commodity” definition to have any real meaning.</p> <p>[Commenter: O-05]</p>	
<p>O-05-05</p> <p>Definition of Commodity: WRRRA has supported the efforts throughout this rulemaking to support the underlying statutory definitions of solid waste and recycling by incorporating elements of positive market value in the determination of solid waste. The definition of commodity is an important piece of that effort. However, the example used in the definition “commodity-grade scrap metal” should be more specific than the generic terminology used here.</p> <p>[Commenter: O-05]</p>	<p>O-05-05</p> <p>Ecology feels the definition of “commodity” is appropriately robust and that the example “commodity-grade scrap metal” is appropriate for use in the definition.</p>
<p>A-19-08</p> <p>"Beneficial Use"</p> <p>This definition narrows the meaning in a way that would significantly reduce the types of material suitable for beneficial use purposes. WSDOT recommends Ecology provide further clarification of this definition that allows for appropriate reuse while protecting human health and the environment. As the language currently exists, we expect to see a decrease in beneficial</p>	<p>A-19-08</p> <p>Beneficial Use Determinations (WAC 173-350-200) are formal decisions by Ecology that provide state-wide relief from solid waste permitting for specific use(s) of solid waste. An application process for applying for a BUD (beneficial use determination) was mandated by the legislature in 1998. The same year, statute was amended to provide an application process to apply for use of a solid waste as a waste-derived soil amendment. Both mandates are implemented in WAC 173-350-200. The addition of "soil amendment," which is defined in statute and this rule, to the definition of "beneficial use" simply</p>

<p>use of materials, which would increase costs to operate the state's transportations system.</p> <p>[Commenter: A-19]</p>	<p>reflects this and is not a change from the current process. The addition of references to WAC 173-350-200 and WAC 173-350-230 make clear that the concept in the rule applies to and is implemented in both of these sections. Ecology does not anticipate any impact to solid wastes that are suitable for beneficial use resulting from the proposed change to the definition.</p>
<p>B-16-03</p> <p>Definition of Recycling: Many discussions and reiterations surround the definition of Recycling, we believe the current definition eliminates an important part of the process, "Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport." WCI would offer the following definition for clarification:</p> <p>"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport. Recycling includes processing waste materials to produce tangible commodities.</p> <p>Maintaining the distinction between preparation and true transformation into something of value is crucial for the new "commodity" definition to have any real meaning.</p> <p>[Commenter: B-16]</p>	<p>B-16-03</p> <p>Please see response to comment O-05-04.</p>
<p>B-16-09</p> <p>Enforcement: Successful regulation for any waste requires effective enforcement</p> <p>[Commenter: B-16]</p>	<p>B-16-09</p> <p>Comment noted.</p>

<p>3. Piles</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>I-01-01</p> <p>Many loads of asphalt removed from a WashDot project have been dumped at a number of locations on Whidbey Island. In one case, the material was dumped in a recent clear cut and may amount to just under 250 cubic yards or as much as 500 cubic yards. It is difficult to say.</p> <p>Reading the proposed revisions, I cannot find anything that would prevent this dumping activity. How can the rules be written to stop this activity? The only thing I can see to suggest is removing "asphaltic materials" from section (1) in Table 320-A. I would like Ecology to consider if there is a means through the rules to address this situation.</p> <p>I've attached photos of one site where asphalt has been dumped in a clear cut.</p> <p>[Commenter: I-01]</p>	<p>I-01-01</p> <p>In the adopted rule, if asphalt was placed at a location with under 250 cubic yards, the location could qualify for an exemption under WAC 173-350-320(2). The site would not be required to notify the jurisdictional health department or provide annual reports. The site would have to meet the performance standards in WAC 173-350-040 and the requirements of WAC 173-350-320 (2)(a)(i-iii). If over 250 cubic yards, the site could also qualify for an exemption. This site would have to meet the exemption requirements in Table 320-A, the performance standards in WAC 173-350-040, and the requirements of WAC 173-350-320 (2)(a)(i-iii). Part of meeting the performance standards is to be in compliance with all other applicable laws and rules, including any local ordinances. If the site is out of compliance with any of the requirements listed they would be required to apply for a permit.</p> <p>One could contact the Environmental Report Tracking System and report these activities and locations. This report would trigger a site visit by either a local or state representative to start looking at the site(s) and determine the best path forward for in each situation.</p> <p>RCW 70.95.240 provides a local jurisdiction the ability to take legal action in cases where someone dumps or deposits solid waste onto or under the surface of the ground or into the waters of this state.</p>
<p>B-14-13</p> <p><u>WAC 173-350-320 Piles used for storage, treatment</u></p>	<p>B-14-13</p> <p>There is not a requirement in WAC 173-350-320(2) Table 320-A for asphalt to: "At the end of each calendar year, the facility must have removed at least fifty percent of the sum of the volume of all</p>

<p>Table 320-A Terms and Conditions for Solid Waste Permit Exemptions</p> <p>At the end of each calendar year, the facility must have removed at least 50 percent of the sum of the volume of all waste present at the start of the calendar year and of the volume of all waste accepted during the calendar year.</p> <p>Comment: It may not be possible to use 50% of asphalt received during a year plus what was stockpiled. As evidenced by the recent market crash, asphalt was not being used since building was not taking place and the transportation agencies did not have any money. This could be a similar concern for concrete use.</p> <p>Proposal: This language should be changed to provide latitude as approved by the permitting agency</p> <p>[Commenter: B-14]</p>	<p>waste present at the start of the calendar year and of the volume of all waste accepted during the calendar year." The exemption that contains the 50 percent removal language requirement is for wood waste, wood derived fuel, and non-ferrous metals.</p>
<p>O-09-05</p> <p>JHD jurisdiction: Table 210-A (2) provides the specific exemption requirements for facilities recycling concrete. This requires any facility recycling concrete for re-sale to allow inspections by the jurisdictional JHD as well as annual throughput reporting. There are many concrete plants that accumulate return concrete, crush and resell this material, but do not accept concrete from outside sources. These facilities are not currently under JHD jurisdiction and this rule represents a change in reporting obligations. These same facilities are also subject to the Piles section of the rule but will receive Piles Permit exemptions when the facility has a Sand and Gravel General Permit. In these cases, there is no need for both the JHD</p>	<p>O-09-05</p> <p>Ecology understands the concern with multiple agencies having oversight at a facility. However, Ecology and the jurisdictional health department would be looking at different requirements. The health department would not have jurisdiction to enforce the sand and gravel permit and the sand and gravel permit inspector would not have jurisdiction to enforce solid waste regulations. For example, to be in compliance with the piles exemption for concrete being stored under a sand and gravel permit [Table 320-A (4)] a facility needs to meet requirements under WAC 173-350-210 and the performance standards of WAC 173-350-040.</p> <p>Additionally, under the permit deferral section, WAC 173-350-0710(9)(l)(i), local health</p>

<p>and the DOE Sand and Gravel Permit Inspector to inspect and regulate the site. Both agencies would be regulating the same things; this is redundant and unnecessary. We suggest amending the proposed rule so that only DOE has jurisdiction in these situations.</p> <p>[Commenter: O-09]</p>	<p>departments are allowed to inspect at reasonable times.</p> <p>Ecology believes the two processes are similar but due to the differences in regulation and authorities that local health departments should still have jurisdiction to inspect in these situations.</p>
<p>A-18-03</p> <p>Table 320-A</p> <p>Again, I think we are allowing farms to store large amounts of potentially rotten produce for extended periods of time without any oversight. There could be vector attraction, leachate problems, and odor issues that would be difficult to enforce.</p> <p>[Commenter: A-18]</p>	<p>A-18-03</p> <p>The proposed exemption provided for agricultural wastes stored on farm in WAC 173-350-320(2), Table 320-A item (2) includes the following enforceable requirements should problems arise [listed in WAC 173-350-320(2)(a)]:</p> <ul style="list-style-type: none"> • Comply with the performance standards • Manage the operation to prevent fugitive dust and the attraction of vectors • Allow the Department or Jurisdictional Health Department to inspect the site at reasonable times
<p>B-03-01</p> <p>The draft WAC 173-350 Solid Waste Handling Standards Table 320-A (row 3) requires submittal of an annual report of quantities in tons; however, capacity and removal requirements (previous column) are to be based on cubic yard calculations. Pile moisture and densities can vary significantly, so the annual reporting quantities should be in the same units (cubic yards).</p> <p>[Commenter: B-03]</p>	<p>B-03-01</p> <p>Ecology agrees and changed "tons" to "cubic yards" in the "Specific Requirements" column of Table 320-A item (3), in WAC 173-350-320(2).</p>
<p>B-02-01</p>	<p>B-02-01</p>

Boise Cascade Wood Products, LLC owns and operates three wood products facilities in Washington State. These facilities convert logs into plywood, lumber, and a variety of wood based byproducts. These byproducts include bark for fuel and/or landscaping, wood chips for paper manufacturing, sawdust, shavings, and plytrim for particle board manufacturing, and log yard sort material.

We have concerns about the application of Section 320 Piles Used for Storage for our operations. Specifically the Wood Waste and Wood Derived Fuel requirements in Table 320-A. We interpret that a pile of log yard sort material prior to conversion into individual hog fuel, rock, mulch, or manufactured soil piles is subject to the piles section. It may not always be possible to use or dispose of 50% of the wood waste generated during a calendar year plus what was stockpiled and remain under the 2000 cubic yard permit threshold.

While we recognize the Department's concern about accumulation of waste materials, we do not believe piles of log sort materials that are routinely sorted, and not allowed to accumulate over long periods of time, should be subject to a solid waste permit. We believe the Department should develop quantity or accumulation rules for log yard sort material piles similar to those developed for the asphalt and concrete piles.

Opinions vary on how much material should be stockpiled and required to be removed or used from a facility and how often and we are willing to work with the Department to create a reasonable accumulation rule specific to wood waste at wood products facilities. But more importantly, what are the environmental concerns with a stock pile of log yard sort materials waiting to be processed that suggests a solid waste permit is needed? As the department noted during the March 9, 2018 webinar Q&A session, the concern is surface water runoff. Water quality impacts including surface water

Other than strengthening the wood waste exemption with a more measurable throughput requirement that includes reporting, very little was changed in regards to the wood waste exemption in WAC 173-350-320(2). If a solid waste permit is required, a permit deferral (to the applicable site specific water quality permit) or variance from certain permitting requirements can be sought.

<p>runoff at our facilities are already managed under a site specific State Waste Discharge Permit, a site specific NPDES Waste Water Discharge Permit, and/or an Industrial Stormwater General Permit. These permits address water quality concerns from these piles and prevent development of a clean-up site. An additional solid waste permit at these facilities will not provide additional water quality protection. We propose it is reasonable to apply the similar exemption requirement of "no upper volume limit" being set for asphalt and concrete piles to wood waste piles at facilities with existing water quality permits.</p> <p>[Commenter: B-02]</p>	
<p>B-01-04</p> <p><u>Piles Rule</u></p> <p>CalPortland supports the Agencies inclusion in Table 320a (4) for an exemption from regulation for facilities which are already covered by Ecology's Sand and Gravel General Permit. This decision is a practicable and common-sense way to avoid duplicate regulation of the same entities.</p> <p>[Commenter: B-01]</p>	<p>B-01-04</p> <p>Comment noted.</p>
<p>O-01-03</p> <p>Temporary Piles</p> <p>The proposed amendment creates an exclusion for "temporary" piles of contaminated soils and contaminated dredge material. This exclusion has no volume limit and no notification or reporting</p>	<p>O-01-03 Ecology's response to when the ninety-day clock would begin for contaminated soils or dredged material is the same. "The ninety-day-clock can begin when the health department becomes aware of the pile if no other information is available." Other than a complaint or a county representative becoming aware of a site through other channels, there are no mechanisms for health departments to become aware of the pile. While this has not changed in the adopted rule, once a pile is discovered it becomes subject to the rule sooner than in the previous version of the rule.</p>

<p>requirements. This language is unacceptable.</p> <p>While the standards state that all contaminated soils and contaminated dredge materials must be removed from the site within 90 days, with no notification or, at a minimum, documentation requirements, storage time on-site will be nearly impossible to know. Ecology states, in response to previous comments about this concern, that "The ninety-day clock can begin when the health department becomes aware of the pile if no other information is available." This response is inadequate as there are no clear mechanisms by which the Health Department will become aware of "temporary" piles with no required documentation or notification.</p> <p>The reduced documentation would make this more difficult to track by the jurisdictional Health Department, and, thus, more difficult to regulate. Further, there seems to be little to nothing stopping "temporary" piles from becoming long-term or permanent: a facility could feasibly move a pile of contaminated soil or dredged materials around their site every 89 days and never need to report or document anything.</p> <p>The final amendment must include clear notification, documenting, and reporting requirements for temporary storage piles for the standards with oversight from Ecology to accomplish their goal of preventing water pollution. Documentation should include, at a minimum: the volume of the pile, the volume moved, the location moved from,</p>	<p>Ecology does not believe it has reduced documentation requirements. There are no documentation requirements for contaminated soils and dredged materials in the previous version of the rule.</p> <p>Ecology does not believe a facility could move contaminated soils or dredged materials every 89 days to avoid regulation. Ecology would view a site moving materials around every 89 days to not be a temporary site. The exemption states "<u>materials are removed from the site within 90 days.</u>" Moving materials around on a site would be an ongoing piles activity subject to permitting.</p> <p>Ecology did not make changes in these areas.</p>
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<p>the location moved too, and the state of the material in the pile.</p> <p>[Commenter: O-01]</p>	
<p>O-01-04</p> <p>CHB also requests a requirement that on-site storage of contaminated soil and dredged materials, including temporary piles, must be at least 150 feet from surface water, and must not drain directly into the surface water, to avoid contaminated runoff entering the waters of Washington.</p> <p>[Commenter: O-01]</p>	<p>O-01-04</p> <p>Ecology would refer to regulations other than this rule (mainly water quality regulations) to determine what the appropriate distance from surface waters would be to place a pile. WAC 173-340-040, Performance standards, requires compliance with all other applicable laws and regulations. Any distance to surface waters requirements would need to come from water quality regulations and do not need to be included in this regulation. It is the responsibility of the site owner to ensure all other applicable laws and regulations are being met. Ecology's Solid Waste Management Program or jurisdictional health department staffs' do not have the authority to enforce water quality requirements, whether it is distance from surface waters or if there is run-off to surface waters.</p> <p>Ecology did not make changes in this area.</p>
<p>O-01-05</p> <p>Furthermore, once a pile has passed the threshold for not requiring tracking, it's exempt from then on. The problem with this is that a pile could change between the state it was in during use/construction and the state it is in when put into piles, thus the same pile could move from not requiring tracking to requiring tracking. CHB asks Ecology to add to the amendment that waste is reported and studied to note whether its condition has changed.</p> <p>[Commenter: O-01]</p>	<p>O-01-05</p> <p>Just because a pile might start out as being regulated under an exemption does not mean it is exempt "from then on," as you suggest. All exemptions throughout the rule have requirements associated with them. If a requirement is not being met, a site or facility may be subject to permitting. Any change in status should be noticed and evaluated through inspections.</p> <p>Ecology did not make changes in this area.</p>

<p>A-17-05</p> <p>Table 320-A</p> <p>From a solid waste enforcement perspective, up to 250 cubic yards of non-putrescible waste is a LOT of material—and QUITE an eyesore-- on a parcel that would not have any time limits and no reporting requirements. Concerned this may open the flood gates for abuse.</p> <p>[Commenter: A-17]</p>	<p>A-17-05</p> <p>Ecology understands the concern, but believes the changes made to the WAC 173-350-320 will provide regulators the tools needed to prevent abuse. If a pile is over 250 cubic yards, more requirements or a permit might be required. If a pile is 250 cubic yards or less, the site would still need to meet the performance standards of WAC 173-350-040 (meet all other applicable regulations, which includes local ordinances) if they are to remain exempt with no notification or reporting.</p>
<p>B-11-05</p> <p>Piles Rules: CPM supports the inclusion in Table 320a (4) for an exemption for facilities covered by Ecology's Sand and Gravel General Permit.</p> <p>[Commenter: B-11]</p>	<p>B-11-05</p> <p>Comment noted.</p>
<p>B-12-04</p> <p>Table 320-A Terms and Conditions for Solid Waste Permit Exemptions Again a very well written table. We suggest that the following be added to this table:</p> <p>Under the column Waste Material add:</p> <p>(6) Source separated asphalt shingles materials with a water quality sand and gravel general permit or construction stormwater general permit.</p> <p>Under the column Volume, Storage time, and Capacity Requirements add:</p> <p>None,</p>	<p>B-12-04</p> <p>Please see response to comment A-21-02</p>

<p>Under the column Specific Requirements for Activity or Operation add:</p> <p>Facilities that recycle asphalt shingles must comply with the recycling standards in WAC 173-350-210, including notification and reporting. Must recycle 100% into hot mix asphalt or cold patch Asphalt products.</p> <p>[Commenter: B-12]</p>	
<p>B-09-01</p> <p>I am writing on behalf of Nucor Steel Seattle, Inc. ("Nucor") to express concern about the proposed revisions to Washington's solid waste management regulations codified in WAC 173-350 and their potential impact on the manufacturing and industry. Nucor owns and operates a steel mill in Seattle that produces steep products in Pacific Northwest from nearly 100 percent scrap steel. This mill has been in operation since 1905 and is Washington's largest recycler.</p> <p>Nucor requests response to the following comments on the proposed rule:</p> <p>1. In general, the proposed rule appear to be more directed at facilities that receive solid waste than facilities that generate and store solid waste for disposal off-site at another, presumably permitted facility. It would be helpful if, like the dangerous waste regulations, requirements are more clearly defined for generators as opposed to receiving facilities (including transfer facilities).</p> <p>For example in Table 320-A Terms and Conditions for Solid Waste Permit Exemptions, wood waste, non-ferrous metals, brick, cured concrete, or asphaltic materials are exempt from permitting if over 250 cubic yards are stored on-site and the facility at the end of each calendar year, the facility has removed at least 50% of</p>	<p>B-09-01</p> <p>Owner responsibilities for solid waste are included in WAC 173-350-025. Those responsibilities can range from using a licensed solid waste company to pick up their wastes, transporting their waste to an authorized solid waste handling facility, or obtaining a solid waste permit or qualifying for a permit exemption in order to handle all solid wastes generated or accumulated at the site. It all depends on how the waste is handled and by whom.</p>

<p>the sum of the volume of all waste present at the start of the calendar year and of the volume of all waste accepted during the calendar year. Reading further, WAC 173-350-320 (2)(a)(iv) refers to "facilities accepting multiple waste materials listed in 320-A". This seems directed at facilities receiving waste and leaves the generator of such materials wondering whether the section is applicable.</p> <p>Nucor suggests providing additional guidance or definition as to whether generation is considered acceptance. For many generators, including Nucor, generation rates cannot be directly measured and generation is tracked via the rate of disposal. This creates circular logic with the exemption terms of Table 320-A.</p> <p>[Commenter: B-09]</p>	
<p>A-10-03</p> <p>Opportunities for Clarification</p> <p>Section 020, Applicability. The Applicability Section (WAC 173-350-020[2]), is one of the sections that is consulted to determine if the proposed regulation applies to temporary stockpiles of potentially contaminated soil, contaminated dredged materials, and pavement rubble. Section WAC 020(2)(y) states that the proposed regulation does not apply to <i>“contaminated soil, as defined in WAC 173-350-100, placed at or near the location of generation within a project site.”</i></p> <ul style="list-style-type: none"> • The Port understands that Ecology’s intent in Section 020(2)(y) is to exclude construction stockpiles. Port discussions in March 2018 with Ecology confirm that Section 020(2)(y), as currently written, would still apply to many temporary stockpiles associated with construction projects. 	<p>A-10-03</p> <p>The exclusion in WAC 173-350-020(y) is meant to be limited to placement of contaminated soils at the location where any potential impact has already occurred. Ecology added storage to the exclusion to provide clarity that the exclusion is not just for final placement of materials. Ecology also added language to provide clarity that the exclusion is not intended to allow distant movement within large or linearly long project sites where one could create a potentially new environmental impact.</p> <p>Please see response to comment A-10-02.</p>

- The terms “project site” and “near,” used in section 020(2)(y), are not defined in WAC 173-350-100. This lack of clarity raises uncertainty related to how project boundaries are defined and movement of contaminated material. This uncertainty will result in increased costs to project owners, real estate buyers and sellers, and contractors as they seek to manage the associated liability.

- As noted below, the Port offers a clarification that may serve to address Ecology’s intent not to regulate construction soil stockpiles.

Section 320, Table 320-A, items 4 and 5. Section 320 addresses piles (of solid waste) used for storage or treatment. Portions of this section, as written, apply to temporary stockpiles of contaminated soil and/or contaminated dredged materials used for construction.

- The section currently treats contaminated soil and dredged material stockpiles differently from piles of Portland cement concrete and asphalt. We encourage Ecology to include a clarification or to include an exemption to solid waste permitting requirements for stockpiles as noted below. This suggestion follows the approach for Portland cement concrete and asphalt paving stockpiles in Section 320, Table 320 A, Item 4.

- The volume, storage time, and capacity column entry in Table 320-A item 5 states “no volume limit.” While this would allow very large piles, which is important, it includes no lower limit for contaminated soil or contaminated dredged material piles.

Suggested Clarification

The Port requests that Ecology include clarification or revision to the regulation to

address concerns identified above. The Port offers clarification wording for Ecology's consideration that would:

a.) confirm that the regulation does not apply to construction-related contaminated soil and contaminated dredged materials stockpiles (Section 020);

b.) exempt temporary material stockpiles from regulation (Section 320) from construction activities on properties covered by an applicable NPDES permit; and better define selected terms.

Suggested clarifications offered by the Port related to project stockpiles are:

- In Section WAC 173-350-020(2)(y) add a phrase following "...within a project site" to the effect of "...or stored at a location addressed by an appropriate National Pollution Discharge Elimination System (NPDES) permit and identified in a Construction Stormwater Pollution Prevention Plan (SWPPP) prepared pursuant to Construction Stormwater NPDES Permit requirements."

- In section 020(2)(y) the terms "project site" and "near" introduces uncertainty regarding what is acceptable. If the clarification to allow stockpiles to be managed under an applicable NPDES permit is included by Ecology, the "project site" would be defined specifically by the NPDES SWPPP, and "near" would not be needed.

- In Section 320, include an exemption to solid waste permitting requirements for contaminated soil and sediment stockpiles that are managed within boundaries as defined in a Construction SWPPP prepared pursuant to Construction Stormwater NPDES Permit requirements. This exemption could be included in Table 320-A Item 5. The exemption would

<p>function similarly to the exemption afforded temporary stockpiles of Portland cement concrete and asphalt under Table 320-A item 4.</p> <ul style="list-style-type: none"> We suggest Ecology specify the applicable volume for contaminated soil and dredged materials with a lower volume limit such as “more than 250 cubic yards” as included in Table 320-A items 3 and 4. <p>[Commenter: A-10]</p>	
<p>A-10-02</p> <p>Background</p> <p>Port representatives met with the Washington State Department of Ecology (Ecology) in September 2017 regarding options to eliminate unnecessary permitting requirements, control the cost of operations, and increase efficiency of the likely process that would be imposed related to temporary stockpiles of contaminated soil, contaminated dredged materials, and paving demolition materials under the revised draft of WAC 173-350. The Port expressed concern to Ecology that the regulation, as written in the September 2017 draft, would require that construction projects with temporary stockpiles of pavement rubble, contaminated soil, and contaminated dredged material obtain a solid waste facility permit. Ecology stated that it was not the intent of the proposed regulation to regulate public and private infrastructure projects as solid waste facilities.</p> <p>Unnecessary Regulation of Construction Stockpiles as Solid Waste</p> <p>During the September 2017 meeting, Port representatives described how commercial and industrial infrastructure development projects temporarily stockpile import and export materials. Some stockpiled materials, especially in industrial and urban areas, could meet the</p>	<p>A-10-02</p> <p>A new exemption, item (6), was added to Table 320-A in WAC 173-350-320(2). This exemption is for temporary piles of contaminated soils and contaminated dredged material managed within boundaries as defined in a Construction Solid Waste Pollution Prevention Plan (SWPPP) prepared pursuant to Construction Stormwater NPDES Permit Requirements. The exemption has no upper volume limit.</p>

<p>new definitions of contaminated soil and contaminated dredged material in WAC 173-350-100 and/or inert waste in WAC 173-350-410(1). These development projects provide excellent opportunities to contain and beneficially reuse materials that might otherwise be landfilled. For large infrastructure projects, the temporary stockpiles would often exist longer than the 90-day permit exemption limit offered in Table 320-A.</p> <p>The Port offered a solution consistent with existing state regulations so that construction projects would not require solid waste facility permits. Most construction activities with temporary stockpiles were commonly also covered by applicable National Pollution Discharge Elimination System (NPDES) permits. These permits require environmental management, active monitoring, and reporting of conditions. The Port suggested that temporary stockpiles managed under applicable NPDES permits be exempt from solid waste facility regulation. The Port understood, based on the meeting, that Ecology agreed and would include an exemption to the requirement for solid waste permitting for activities with applicable NPDES permits.</p> <p>[Commenter: A-10]</p>	
<p>A-07-07</p> <p>WAC 173-350-320 Piles used for storage or treatment: Please keep all components within this section to track materials stored in outdoor piles and require notification and reporting for the recyclable materials in order for JHDs to ensure exempt parameters are met.</p> <p>[Commenter: A-07]</p>	<p>A-07-07</p> <p>Reporting is required for sites with a piles solid waste permit. Notification and reporting are required for the exemption in WAC 173-350-320(2), Table 320-A, item (3). For the other exemptions that do not require notification or reporting there are clear volume or storage time requirements listed. If the Jurisdictional Health Department finds any of the volume or storage time requirements have been exceeded they can initiate the permitting process. Ecology believes the exempt</p>

	<p>requirements are clear for regulators to determine if requirements are being met.</p>
<p>O-02-20</p> <p>173-350-320</p> <p>Preliminary Regulatory Analysis, page xi, 3 and 10 173-350-320</p> <p>Table 320-A Terms and Conditions for Solid Waste Permit Exemptions includes and exemption for the temporary storage of contaminated soil. There are no provisions identified in the proposed rule that would prevent the infrequent re-use of a site multiple times for temporary contaminated materials storage as long as each time the site is used that all contaminated soils are removed from the site within 90 day. However the terms "does not recur" is included within the preliminary regulatory analysis on multiple pages (xi, 3 and 10) in reference to this exemption. Ecology should amend the Preliminary Regulatory analysis to reflect the proposed rule; or include the costs of permitting storage sites used infrequently to store contaminated soils.</p> <p>[Commenter: O-02]</p>	<p>O-02-20</p> <p>It is not Ecology's intent to include the situation described within the exemption. Ecology added language to WAC 173-350-320(2) Table 320-A, item (5) that clarifies that recurring use of a site may trigger permitting.</p>
<p>O-02-21</p> <p>173-350-320</p> <p>Ecology should include an exemption for contaminated soil stored at facilities that already have a water quality sand and gravel or construction stormwater permit. Similar to exemptions provided for brick, cured concrete, or asphaltic material, these water quality permits can be used to address water</p>	<p>O-02-21</p> <p>Please see response to comment A-10-02.</p>

<p>quality concerns and will remain in effect until materials are removed.</p> <p>[Commenter: O-02]</p>	
<p>A-02-03</p> <p>Piles, -320: Delete "all" from Table 320-A (5) and add a maximum amount, to read, "Contaminated soils and contaminated dredged materials over 300 cubic yards are removed from the site within ninety days." This change accommodates municipalities' ongoing need to collect and temporarily store street sweepings and street excavation soil in continuous piles for periodic pickup and disposal.</p> <p>[Commenter: A-02]</p>	<p>A-02-03</p> <p>The situation described is the type of ongoing solid waste handling activity that should be subject to permitting. Other materials afforded an exemption have less potential to cause human health or environmental harm. The only exemption allowed without an upper volume limit or throughput requirement is the exemption for brick, cured concrete, or asphaltic material with a water quality sand and gravel or construction stormwater general permit. A variance for some requirements or a permit deferral are other options available for the situation described.</p>
<p>A-02-04</p> <p>Piles, -320: Remove the 90-day limit in Table 320-A (5) for a municipality's storage facilities, to read "... removed from the site within ninety days, except street waste and soil at municipally-owned sites."</p> <p>This change accommodates municipalities' ongoing need to collect and temporarily store street sweepings and street excavation soil in continuous piles for periodic pickup and disposal.</p> <p>[Commenter: A-02]</p>	<p>A-02-04</p> <p>It would not be appropriate for Ecology to carve out an exemption specifically for some materials at "municipally-owned sites" without also making that exemption available to anyone else that meets conditions (other than just being a "municipally-owned" site).</p> <p>The situation described is the type of ongoing solid waste handling activity that should be subject to permitting. Other materials afforded an exemption have less potential to cause human health or environmental harm. The only exemption allowed without an upper volume limit or throughput requirement is the exemption for brick, cured concrete, or asphaltic material with a water quality sand and gravel or construction stormwater general permit. A variance for some requirements or a permit deferral are other options available for the situation described.</p>
<p>A-05-22</p>	<p>A-05-22</p>

<p>173-350-320</p> <p>Ecology should include an exemption for contaminated soil stored at facilities that already have a water quality sand and gravel or construction stormwater permit. Similar to exemptions provided for brick, cured concrete, or asphaltic material, these water quality permits can be used to address water quality <u>concerns and will remain in effect until materials are removed.</u></p> <p>[Commenter: A-05]</p>	<p>Please see response to comment A-10-02.</p>
<p>A-05-21</p> <p>173-350-320</p> <p>Preliminary Regulatory Analysis, page xi, 3 and 10</p> <p>Table 320-A Terms and Conditions for Solid Waste Permit Exemptions includes an exemption for the temporary storage of contaminated soil. There are no provisions identified in the proposed rule that would prevent the infrequent re-use of a site multiple times for temporary contaminated materials storage as long as each time the site is used that all contaminated soils are removed from the site within 90 day. However the terms “does not recur” is included within the Preliminary Regulatory Analysis on multiple pages (xi, 3 and 10) in reference to this exemption. Ecology should amend the Preliminary Regulatory Analysis to reflect the proposed rule; or include the costs of permitting storage sites used infrequently to store contaminated <u>soils.</u></p> <p>[Commenter: A-05]</p>	<p>A-05-21</p> <p>Please see response to comment O-02-20.</p>

<p>A-06-24</p> <p>26) Table 320-A (4)– As stated in item (3) of this table, the TPCHD also supports including the requirement for removal of 50% annually and an upper volume limit under “Volume, Storage Time and Capacity Requirements”. This would provide the jurisdictional health departments the necessary tools to monitor such operations to prevent the abuse of this exemption category and prevent sites from becoming above ground landfills for eternity.</p> <p>[Commenter: A-06]</p>	<p>A-06-24</p> <p>Comment noted.</p>
<p>A-06-23</p> <p>Subsection (10) – It appears that the citation of (11)(a) in the first paragraph is incorrect. The citation should be (12)(a).</p> <p>[Commenter: A-06]</p>	<p>A-06-23</p> <p>Subsection 10 is the last subsection WAC 173-350-320. Ecology does not see a citation being made to (11) (a) nor does the piles section have a section 11 or 12.</p>
<p>A-06-22</p> <p>Table 320-A, Items (1) and (3) - The rule specifically calls out “nonferrous metals” in this table.</p> <p>The TPCHD recommends that the pile exemptions in this section of the rule should also pertain to “ferrous metals”. Or, the TPCHD supports removing reference to both metal categories if it is the intent of Ecology that these categories typically meet the criteria established by Section -021(3), Determination of solid waste, to be “no longer a solid waste”.</p> <p>[Commenter: A-06]</p>	<p>A-06-22</p> <p>It was intentional to separate ferrous metals from non-ferrous metals. The distinction is not based on whether one or the other would meet the solid waste determination in WAC 173-350-021, but rather to include non-ferrous metals as they match up with inert criteria listed in Chapter 70.95 RCW. Ecology did not make any changes in regards to exemptions for ferrous metals in WAC 173-350-320(2), Table 320-A.</p>

<p>A-06-21</p> <p>Table 320-A, Item (2) Agricultural waste and on-farm vegetative wastes stored on farms – The TPCHD recommends to slightly modify the language to include that these wastes may be used at other appropriate sites such as other farms. Therefore, the “Volume, Storage Time, and Capacity Requirements” for this item could read: “The duration of storage of the entire pile is limited to one year and limited to the amount that will be applied to the site or other appropriate sites during a one-year period. Subsequent....”</p> <p>[Commenter: A-06]</p>	<p>A-06-21</p> <p>Ecology believes the language in the previous rule would have allowed for the materials to be used on "other farms." In order to make this clearer, Ecology made the following change to the exemption language in WAC 173-350-320(2), Table 320-A:</p> <p>"The duration of storage of the entire pile is limited to one year and limited to the amount that will be applied to <u>a</u> site during a one-year period." Changed 'the site' to 'a site.'</p>
<p>O-12-05</p> <p><u>Section 320 and Table 320A</u></p> <p>We appreciate the discussion and efforts of working with Al Salvi on this section and the recognition of the agency’s Sand and Gravel NPDES and CSWP as a primary document to manage concrete and aggregate material at our facilities and on construction sites. The NPDES permits now provide a clear pathway to allow one set of best management practices to manage these materials without creating a redundant or conflicting regulatory process. This effort towards simplicity for both documents is appreciated.</p> <p>[Commenter: O-12]</p>	<p>O-12-05</p> <p>Comment noted.</p>
<p>O-06-04</p> <p>Section 320 and Table 320-A – Piles. WPPA is concerned that Piles Section (WAC 173-350-320) requires solid waste facility permitting for stockpiles of materials used during construction</p>	<p>O-06-04</p> <p>Please see response to comment A-10-02.</p>

<p>projects. Port construction projects often involve many phases, including: planning; preparation; material staging; and, in some cases, phased implementation. The duration of the activities that include maintaining material stockpiles may be years, exceeding the 90-day exemption included in Table 320-A Item 5. Based upon our meetings in August and September 2017, we understood that an exemption from permitting would be included in the regulation for construction project stockpiles of contaminated soil, contaminated dredged material, and paving rubble managed under an appropriate NPDES permit such as a Construction Stormwater NPDES or other NPDES permits applicable to the facility. We request that Ecology clarify the rule to include an exemption for temporary stockpiles of contaminated soil and contaminated material that are managed under applicable NPDES permits. The clarification could be included in Table 320-A Item 5, such as that used in Table 320-A Item 4, or in other sections (e.g., WAC 173-350-020[2][y]).</p> <p>Thank you for your consideration of our comments. Our members have been pleased by Ecology's constructive approach to writing these regulations. As a result, we are surprised to say the least when issues we considered resolved then re-emerge in the CR-102. We stand ready to work with agency staff to ensure that previous commitments can be incorporated in this rule.</p> <p>[Commenter: O-06]</p>	
<p>O-15-35</p> <p>WAC 173-350-320 & 410 Piles used for Storage or Treatment & Inert Waste Landfills Comment Summary:</p> <p>The tenfold increase in permitting threshold from 250 cubic yards to 2000 for piles and inert</p>	<p>O-15-35</p> <p>The exemption for wood waste, wood derived fuel and nonferrous metals does allow for up to 2,000 cubic yards of material to be on-site before a permit is required. There is a clear throughput requirement for this exemption that will make it easier to</p>

<p>waste landfills should remain at 250 in the final rule.</p> <p>[Commenter: O-15]</p>	<p>determine compliance with the requirement compared to what is in the previous rule.</p> <p>This throughput requirement combined with the other requirements associated with this exemption (notification, reporting, and inspections to name a few), will enable regulators to permit these sites if requirements are not being met. Ecology did not change this threshold.</p>
<p>O-15-31</p> <p>The current draft rule maintains the higher threshold for exemption adopted In the previous draft, at 2,000 cubic yards, up from 250 in the current rule. WRRRA opposes the tenfold increase for piles, the WAC 173-350-410 Inert Waste Landfills, and the WAC 173-350 995 Soil and Sediment Criteria sections. In reality, 2,000 cubic yards is a large volume of material. Considering an average dump truck somewhere in the range of 10-14 cubic yard capacity, the new rule anticipates up to 200 truckloads of material before a permit is required. This expansion is ill advised given Washington's history with exempt facilities and clean-up sites.</p> <p>[Commenter: O-15]</p>	<p>O-15-31</p> <p>Please see response to comment O-15-35.</p>
<p>O-15-33</p> <p>WAC 173-350-320 & 410 Piles used for Storage or Treatment & Inert Waste Landfills Comment Summary:</p> <p>The rule should specify that structures must be fully enclosed for purposes of this rule.</p> <p>[Commenter: O-15]</p>	<p>O-15-33</p> <p>Ecology revised the applicability section in WAC 173-350-320(1) to clarify that the piles section applies only to outdoor storage or treatment of solid waste in piles. Ecology also revised the applicability section so that it points to other sections in the rule where indoor storage in piles is covered. The rule defines indoor storage as "a structure with a roof and walls that protect solid waste from precipitation." The definition does not say "fully enclosed" but does prohibit the idea of just a tarp or freestanding roof as sufficing for meeting this requirement.</p>

<p>O-15-30</p> <p>WAC 173-350-320 & 410 Piles used for Storage or Treatment & Inert Waste Landfills.</p> <p>WRRA viewed the enhanced permitting requirements for piles in the previous draft as a model that other sections should adopt. This version appears to back off from the straightforward approach of previous versions in favor of material specific categories and requirements for permit exemption. We support some level of permitting and inspection for all solid waste handling facilities.</p> <p>From conversation with DOE staff, our understanding is that exempt facilities under the new WAC 173-350-210 cannot store materials outside in piles and remain exempt under the new rules. Both the piles section and exempt facilities section should make this more evident to operators and perhaps include the requirement in each sections respective tables which will likely become "go to" sections of the respective rules. The piles section should also specify that a structure must be fully enclosed. From our understanding from Department staff, this is the intent of the chapter, but is not fully spelled out in the draft rule. The piles section should clearly state structures must be fully enclosed, a mere covering, be it a tarp or a free standing roof will not suffice.</p> <p>[Commenter: O-15]</p>	<p>O-15-30</p> <p>Correct, the adopted rule provides for specific material exemptions. If facilities do not meet the terms and conditions of an exemption, a permit is required. All exemptions include the provision to allow the jurisdictional health department or Ecology to inspect at reasonable times.</p> <p>Please see response to comment O-15-33.</p>
<p>O-15-32</p> <p>WAC 173-350-320 & 410 Piles used for Storage or Treatment & Inert Waste Landfills Comment Summary:</p> <p>The clarity and enhanced permitting requirements of the previous draft are preferable</p>	<p>O-15-32</p> <p>Please see response to comment O-15-35.</p>

<p>to the material specific approach in the current draft.</p> <p>[Commenter: O-15]</p>	
<p>O-05-11</p> <p>WAC 173-350-320 Piles used for Storage or Treatment.</p> <p>Clarification on when the rule applies and limiting the scope of the exemption under this section is a positive change, but more clarity is needed on several points. Our understanding is that exempt facilities under the new WAC 173-350-210 cannot store materials outside in piles and remain exempt under the new rules. This is an improvement, but both the piles section and exempt facilities section should make this more evident to operators and include this requirement in the “table” for each section. It is also an improvement to limit the piles exemption to only the materials listed and require all other wastes stored outdoors in piles to obtain solid waste handling permits. Problematic materials like glass and asphalt shingles stored outdoors in large piles should require a solid waste permit. Finally, the rule should clearly state that for piles to be considered “indoors,” structures must be fully enclosed, a mere covering, be it a tarp or a free standing roof will not suffice.</p> <p>[Commenter: O-05]</p>	<p>O-05-11</p> <p>Please see response to comment O-15-33.</p>
<p>O-05-12</p> <p>The current draft rule maintains the higher threshold for exemption adopted in the previous draft, at 2,000 cubic yards for several materials, up from 250 in the current rule. WRRRA opposes</p>	<p>O-05-12</p> <p>Please see response to comment O-15-35.</p>

<p>this tenfold increase in pile size. In reality, 2,000 cubic yards is a huge amount of material. With an average dump-truck somewhere in the range of 10-14 cubic yard capacity, the new rule anticipates up to 200 truckloads of material before a permit is required. This expansion is ill advised given Washington's history with exempt facilities and clean-up sites.</p> <p>[Commenter: O-05]</p>	
<p>B-16-06</p> <p>WAC 173-350-320 Piles used for Storage or Treatment.</p> <p>The current draft rule maintains the higher threshold for exemption at 2,000 cubic yards for several materials, up from 250 in the current rule. WCI and WRRRA opposes this increase in pile size. In reality, 2,000 cubic yards is a large amount of material. Considering an average dump-truck somewhere in the range of 10-14 cubic yard capacity, the new rule anticipates up to 200 truckloads of material before a permit is required. This expansion is ill advised given Washington's history with exempt facilities and clean-up sites.</p> <p>[Commenter: B-16]</p>	<p>B-16-06</p> <p>Please see response to comment O-15-35.</p>
<p>B-10-07</p> <p>WAC 173-350-320 PILES USED FOR STORAGE OR TREATMENT</p> <p><u>The 90-day pile exemption in WAC 173-350-320 – Table 320-A should be clarified to prevent long-term facilities from claiming to be exempt by removing each pile of contaminated</u></p>	<p>B-10-07</p> <p>Please see response to comment O-02-20.</p>

<p><u>soils or dredged sediment every 90 days and adding new piles.</u></p> <p>For years, there has been confusion over the contaminated soils/dredged sediment piles requirements. Some facilities have avoided permitting by simply making sure all piles are removed every 90 days even though the facility continues to operate as an “exempt piles facility” for much longer, sometimes years. Consider, for example, a facility that receives Pile #1 of contaminated soils on Day 1, then Pile #2 on Day 30, then Pile #3 on Day 60, then Pile #4 on Day 90, and Pile #5 on Day 120, etc. etc. So long as Pile #1 is removed before Day 90, and Pile #2 is removed by Day 120, etc., etc., the facility might argue that it is exempt, even though there are always piles on site and the facility continues to receive new piles every 30 days for years and years. Such an operation would be a permanent facility that should be subject to the permitting requirements of non-exempt facilities managing piles of contaminated soils and sediments. Ecology should revise this section to state that the exemption applies only to temporary piles storage facilities operating for less than 90 days. Any facility that operates for more than 90 days would be required to obtain a permit.</p> <p>[Commenter: B-10]</p>	
<p>B-10-08</p> <p><u>Each operating facility presented in WAC 173-350-320 – Table 320-A should be required to submit notification to Ecology of their intended piles operation.</u></p> <p>Each type of operating facility, regardless of the waste material handled, should at the very least be required to notify Ecology of the handling, storage, and management of piles. The materials managed are by their very nature solid waste and, hence, require</p>	<p>B-10-08</p> <p>There are local requirements (i.e. zoning and building codes) that would give counties a heads up that a possible solid waste handling facility might be looking to establish itself in the county. Also, citizen inquiries or complaints can also alert locals to such a facility. Even if found out after the establishment of the facility, Ecology feels the exempt requirements are robust enough to bring the facility under a permit if needed.</p>

<p>some type of special handling, even if they are managed and stored in piles. Each waste material type, as provided in the table, has some type of throughput requirement, whether it be storage time or a capacity limit. Given that there is a throughput obligation by the operator, there should be a notification requirement to Ecology. How else will Ecology be able to verify a facility is meeting its throughput requirements, waste materials handled, and is continuing to operate under a permit exemption? Along with the notification requirement, there should be a condition that Ecology, as part of that exemption, is authorized to inspect the site at reasonable times to verify conditions of that exemption.</p> <p>[Commenter: B-10]</p>	<p>WAC 173-350-320(2)(a)(iii) allows the department or jurisdictional health departments to inspect exempt sites at reasonable times.</p>
<p>B-10-09</p> <p><u>Handling of Waste Material (4) in piles as given in WAC 173-350-320 – Table 320-A presents potential compliance issues.</u></p> <p>If a facility managing Waste Material (4), that is, <i>brick, cured concrete, or asphaltic material facilities with a water quality sand and gravel or construction stormwater general permit</i>, and that operator is recycling the materials, then the table points to Section 173-350-210, Recycling and Material Recovery Facilities. However, subsection 173-350-210 (b) clearly indicates that this section does not apply to storage and treatment of solid waste in outdoor piles; yet, the table references this section as a method to maintain a piles exemption. It may be more useful and evident if the specific requirements to</p>	<p>B-10-09</p> <p>Please see response to comment O-15-33.</p> <p>If a facility is not meeting the exemption requirements in WAC 173-350-320(2) Table 320-A(4) (does not recycle materials or no longer recycles material due to markets no longer being available), the short answer is a permit would be required. That said, it is difficult to predict what may or may not happen in the future and the circumstances around it. Therefore, Ecology does not plan to add language to cover the different possibilities known or not known at this time.</p>

maintain this piles exemption are stated and defined in the table.

With this said, this exemption category leaves another regulatory issue unanswered and undefined: what if that a Waste Material category (4) facility does not recycle the materials, particularly when recycling end markets are no longer available, not viable, or sustainable? What obligations would that facility have to undertake to maintain a piles exemption or will a solid waste handling permit now be required? We suggest that Ecology add clarifying language that addresses these possibilities, especially given today's state of recycling markets.

[Commenter: B-10]

<p>4. Inert Waste</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-12-15</p> <p>WAC 173-350-410.1.a The allowance of several of the materials allowed here in inert landfills are materials that are banned by King County ordinance from being disposed of in a landfill (cured concrete, asphaltic materials, and brick). We need language added to allow for local bans on the landfilling of these materials to trump these allowances.</p> <p>[Commenter: A-12]</p>	<p>A-12-15</p> <p>Local landfill bans are legal and do not require authorization in this rule.</p>
<p>A-07-04</p> <p>WAC 173-350-100 Definition for "Glass" makes reference to "glass materials having significant concentrations..." Ecology's response to the question in the 2nd Preliminary Draft, "What is meant by 'significant concentrations...'" states the JHDs would be determining what is significant. The regulations do not provide a set of objective factors or standards for JHDs to use in determining what is deemed "significant," and allows for inconsistency across county boundaries for materials in use in multiple counties.</p> <p>Please note that the word "significant" in WAC 173-350-710(4) for Permit Modifications was removed due to ambiguity in the absence of standards for determining whether a "significant" change would trigger a permit modification. Also, inert waste landfills are limited to ceramics and glass due to local C&D</p>	<p>A-07-04</p> <p>Please see response to comment A-04-01.</p>

<p>bans now so JHDs' determinations need to be supported by the regulations.</p> <p>Provide a definition for "significant" or "significant concentrations" as levels that will have impact to human health or the environment based on the test results from how the material will be handled, or provide objective factors or standards that would deem a material to have significant concentrations.</p> <p>[Commenter: A-07]</p>	
<p>A-07-03</p> <p>WAC 173-350-100 Definition for "Cured Concrete" makes reference to off-spec concrete not meeting the 1200 pounds-per-square-inch compressive strength requirement which may be evaluated for consideration as a cured concrete by the solid waste permitting agency (i.e., jurisdictional health departments [JHDs]). How would JHDs evaluate this material? What technical standards, if any, does Ecology wish JHDs to apply in categorizing material as cured concrete? Will training be provided by Ecology to assist JHDs in evaluating this material? Will Ecology have technical staff available to assist with this evaluation?</p> <p>[Commenter: A-07]</p>	<p>A-07-03</p> <p>Please see response to comment B-01-02.</p>
<p>A-05-11</p> <p>173-350-020 and 173-350-100, Engineered Soil</p> <p>The impact of this change may be significant if it changes the way materials from the demolition of the Alaskan Way Viaduct is handled based on the more restrictive pH standard in the proposed rule. This impact should be evaluated in the</p>	<p>A-05-11</p> <p>Ecology does not anticipate the revised rule having any impact on "concrete based transportation infrastructure" from the Alaska Way Viaduct as cured structural concrete is a listed inert waste and not subject to the soils criteria.</p>

<p>SEPA documentation as well as Preliminary Regulatory Analysis for demolition of all concrete based transportation infrastructure.</p> <p>[Commenter: A-05]</p>	
<p>B-04-08</p> <p><u>WAC 173-350-990 Criteria for Inert Waste</u></p> <p>The proposed rule would delete Section 990, Criteria for Inert Waste, and substitute a discrete listing of inert wastes in WAC 173-350-410(1). This proposed listing from RCW 70.95.065(2), the statutory list of wastes that must be allowed in inert waste landfills if they have not been tainted. However, the statute at 70.95.065(1) RCW requires more of the Department of Ecology. The statute states that the Department “<i>shall develop specific criteria</i> for the types of solid wastes that are allowed to be received by inert waste landfills that seek to continue operation after February 10, 2003.” (emphasis added). While Section -990(3) might be inadequate and in need of revision, the statute requires that Ecology’s regulations include criteria that can be applied to unlisted materials including future secondary materials, not just a static inert waste list drawn from the statute. In order to fulfill its mandatory duty under the statute to promulgate <i>criteria</i> for the determination of “inert waste” under 70.95.065(1), in addition to the listed materials in 70.95.065(2), WAC 173-350-990 must be retained, and Ecology should take additional public comment on revisions to the criteria in -990(3).</p> <p><i>[Comment included a footnote: For example, the criteria at WAC 73-350-</i></p>	<p>B-04-08</p> <p>Please see response to comment A-04-02.</p>

<p><i>990(3)(a)(i) states that inert waste (not otherwise listed) “[n]ot be capable of catching fire and burning from contact with flames.” The ambiguous “capable of catching fire and burning from contact with flames” test provides little guidance because virtually any carbon-containing material is capable of being combusted in a high temperature incinerator, but many might not catch fire from under common conditions. This criteria adds little to the other criteria in Section 990 (including the Dangerous Waste criteria, which also addresses ignitibility) and should be deleted or made more specific with flame temperature and duration specifications.]</i></p> <p>[Commenter: B-04]</p>	
<p>A-04-02</p> <p>WAC 173-350-410(1) list of inert wastes: The list of inert wastes in proposed WAC 173-350-410(1) is more limited than inert waste under the existing regulation. Currently, WAC 173-350-990 (proposed for elimination in the new regulation) allows for the listed inert wastes, plus other wastes which meet the criteria in WAC 173-350-990(3).</p> <p>In response to comments on the second preliminary draft, Ecology stated that the new rule "relies on the list of types of solid wastes that statute authorizes inert waste landfills to receive (see RCW 70.95.065)." This misrepresents the statute: The list in RCW 70.95.065 isn't a list of all waste authorized as inert, but instead is the minimum that must be included as inert. (See RCW 70.95.065(2).) The minimum inert waste list in the statute also includes "[o]ther materials as defined in chapter 173-350 WAC." The criteria approach in the existing regulation at WAC 173-350-990(3) is entirely consistent with the statutory provision,</p>	<p>A-04-02</p> <p>Ecology reviewed how the jurisdictional health departments used the criteria for inert waste, and found that this tool was primarily being used to assess soils. The inert waste stakeholder workgroup found the section to be overly subjective and rarely utilized for non-soil wastes. Ecology found that most of the non-soil wastes that had been assessed inert from one jurisdiction using the criteria would not be considered inert by another jurisdiction, and as each jurisdiction could determine which tests the generator had to use to demonstrate the criteria, no level playing field could be established. Also, as the criteria do not apply to un-tainted naturally occurring aggregate – rocks - the workgroup could not identify other waste materials that they felt met all the criteria. The Department was therefore left with having developed a criteria for which even the wastes listed in statute could not meet. For instance, cured concrete is capable of generating leachate that can violate water quality standards, and so would fail the criteria, but as a listed waste from statute, it</p>

<p>and Ecology has provided no justification for eliminating these criteria in favor of a more limited approach. This being the case, the WAC 173-350-990(3) criteria should be retained, as authorized by RCW 70.95.065.</p> <p>[Commenter: A-04]</p>	<p>must be allowed to be disposed of in an inert waste landfill without restriction.</p>
<p>A-04-03</p> <p>WAC 173-350-410(1): It does appear that Ecology is narrowing the universe of inert wastes which could impact costs at Hanford if formerly inert wastes become subject to costlier disposal. PRC would prefer that the original definition of inert waste remain as currently written so as to not impede Hanford cleanup.</p> <p>[Commenter: A-04]</p>	<p>A-04-03</p> <p>Ecology recognizes your concern. Non-soil wastes that are not listed inert wastes will still have the option of disposal in limited purpose landfills. Not all waste types and locations require more stringent design criteria under the limited purpose landfill regulations than an inert waste landfill. Should a waste prove benign, alternatives to MSW landfilling exist.</p>
<p>A-04-01</p> <p>WAC 173-350-100 definition of "glass":</p> <p>The proposed definition of "glass" excludes "glass materials containing significant concentrations of lead, mercury, or other toxic substances."</p> <p>In comments on the second preliminary draft, Ecology was asked to clarify the meaning of "significant concentrations." In response, Ecology stated that "[d]etermining what is significant in this context will be a judgment on the part of the solid waste permitting authority."</p> <p>Deferring to the permitting authority to make this regulatory interpretation will result in uncertainty within the regulated community and likely lead to inconsistent application within the State. It is contingent upon Ecology to write rules clearly so that they can be understood by those required to comply. Certainly Ecology must have some concept in mind, even if only</p>	<p>A-04-01</p> <p>Ecology revised the definition of "glass" to use terms commonly used in the glass industry to describe particular types of glass and their typical ranges of chemical composition. The revised definition also has more global applicability in the rule, moving away from the more narrow original function of the definition as a waste screening mechanism associated with inert waste landfills. Glass is mentioned in the rule in the definitions of "Physical contaminants" as they relate to incoming feedstocks and compost quality..., and of "Recyclable materials"; the revised definition is more consistent with all uses of the term in the rule. Ecology believes the revised definition provides a more objective description of what is considered to be glass, both for inert waste landfills and the other uses of "glass" in the rule.</p> <p>With regards to the reference "significant concentrations," the revised definition uses different language which provides a better baseline:</p>

<p>in a general sense, when referring to "significant concentrations" of toxic substances in glass. As requested previously, please clarify the meaning of this term in regulation to facilitate a clear understanding and consistent State-wide application. For example, a "significant concentration" could be "a level exceeding that which is found in glass produced for public use; e.g., levels of lead which exceed those typically found in leaded glass." Consideration should also be given to establishing an exception for glass which, when tested using the Toxicity Characteristic Leaching Procedure, does not leach hazardous constituents at levels which are above unrestricted use values established under the Model Toxics Control Act regulations.</p> <p>[Commenter: A-04]</p>	<p>“Other noncrystalline amorphous solid materials, including lead glass, specialty glasses containing toxic constituents at concentrations greater than those typically found in soda-lime or borosilicate glasses, and soda-lime or borosilicate glass which has been tainted through exposure to chemical, physical, biological, or radiological substances are not considered to be glass for the purposes of this chapter.”</p> <p>While not validating them here, Ecology notes that there are numerous references on the web that respond to the question of typical concentrations of contaminants in different types of glass.</p>
<p>A-19-05</p> <p>“Inert Waste” Definition Elimination</p> <p>The proposal excludes an ‘inert waste’ definition - this is problematic because the proposed rule includes a section that relates to specific requirements for inert waste landfills (WAC 173-350-410). The term “inert waste” appears repeatedly in the proposed rule. WSDOT recommends Ecology include a definition relating to inert material in the final rule.</p> <p>[Commenter: A-19]</p>	<p>A-19-05</p> <p>Ecology reinstated the definition of “inert waste” in the adopted rule.</p>
<p>A-19-04</p> <p>"Cured Concrete"</p> <p>A) This new definition does not clearly define what cured “off-specification concrete” means, provides no testing methodology or criteria, and states that it will be evaluated on a case-by-case basis. This definition would make the current</p>	<p>A-19-04</p> <p>Please see response to comment B-01-02.</p>

regulatory environment more uncertain, has no demonstrated environmental benefit, and would increase costs and require the disposal of potentially reusable materials.

B) This new definition has the potential to interfere with the intent of RCW 70.95.805, requiring WSDOT to use recycled concrete. WSDOT recommends removing this definition or revising it in a way that would allow for more concrete to be considered cured, clearly define the criteria, and provide a testing method.

[Commenter: A-19]

<p>5. Tires</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-01-06</p> <p><u>Waste Tires</u>: The definition of waste tires is not clear. The first and second sentences seem to say different things. The first sentence of the definition seems to indicate any used tire is a waste tire, while the second sentence seems to limit this to automobile tires. Please provide clarification</p> <p>[Commenter: B-01]</p>	<p>B-01-06</p> <p>The second sentence in the definition of “waste tires,” which refers to use on public highways is provided as an example and to show inclusion. It is not meant to exclude other types of tires that meet the intent of the first sentence. The key words in determining whether a tire is a waste tire or not are, “no longer suitable for their original intended purpose.”</p>
<p>B-01-07</p> <p>Waste Tire Storage: Section 173-350-350 (page 94) includes the regulations for the storage of waste tires. Under 173-350-250(a) the rule applies to facilities with 800 or more automobile tires or the equivalent 8 total tons. Large heavy equipment such as a Cat 988 loader have tires which weigh more than 3000 pounds each. Therefore, the presence of 4 to 5 used heavy equipment tires could trigger this regulation. Heavy equipment tires are very dissimilar to vehicle tires as the overall surface area of 800 tires is far greater than 5 heavy equipment tires. CalPortland believes that the Agency does not intend the regulation to apply in situations where a facility has a small number or large tires but asks the Agency to provide clarification.</p> <p>[Commenter: B-01]</p>	<p>B-01-07</p> <p>Ecology added clarifying language to the applicability section, WAC 173-350-350(1)(a) to account for larger heavy equipment tires:</p> <p>“(a) These standards apply to facilities that store waste tires in quantities greater than:</p> <p>(i) Eight hundred automobile tires or eight tons of waste tires when each individual tire weighs less than five hundred pounds:</p> <p>(ii) Twenty tons of heavy equipment tires when each individual tire weighs five hundred pounds or more.</p>

<p>B-11-04</p> <p>Waste Tires: CPM asks that Ecology revise the definition to clarify the intent. It is confusing at this time. Additionally, CPM requests an exemption of sorts for large tires being stored at facilities and are handled in such a way that they are not considered waste tires. Several heavy equipment tires could exceed the 8 tons limit and CPM is asking for clarification.</p> <p>[Commenter: B-11]</p>	<p>B-11-04</p> <p>Please see response to comment B-01-06 and comment B-01-07.</p>
<p>B-07-04</p> <p>Waste Tire Storage</p> <ul style="list-style-type: none"> • The language in WAC 173-350-350 includes a number of tires (section a) and a maximum tonnage (section b). • The inclusion of tonnage limit can greatly impact operations of large off road tires do have significant value depending on market conditions. • Recommendation: Remove the tonnage limit from the draft language, as large off road vehicle tires can be several thousand pounds each. <p>[Commenter: B-07]</p>	<p>B-07-04</p> <p>Please see response to comment B-01-07.</p>
<p>A-06-25</p> <p>Section -355 Waste tire transportation</p> <p>Applicability (d) - The United States, the State of Washington, and local governments and their contractors should also have to use a licensed tire transporter. The clean-up of waste tire piles</p>	<p>A-06-25</p> <p>WAC 173-350-355(1)(d) is language from the previous version of the rule that was simply moved into a new section. In fact, it was language in the original Waste Tire Carrier and Storage License Rule under previous WAC 173-314. Ecology did not propose to change the language, and input and</p>

<p>is the appropriate time for using a licensed tire transporter.</p> <p>[Commenter: A-06]</p>	<p>comments have not been sufficient to warrant a change.</p>
<p>O-14-16</p> <p>WAC 173-350-350 & 355 Waste Tire Storage and Transportation.</p> <p>WRRRA has monitored the progress of changes to this section, and was part of the stakeholder workgroup for the rule. In general, we are in support of increased regulation of storage and transportation of waste tires. Improper handling of these tires is a very real danger to public health and the environment, and must be closely monitored, not only by DOE, but by local health and fire departments.</p> <p>It seems a good idea to give transportation its own section, while retaining the exemption for solid waste haulers regulated under RCW 81.77. We think the exemption has always been intended to include cities which either contract for solid waste collection or provide service by a municipal department. It may be appropriate to include language reflecting these exemptions to avoid any possible confusion.</p> <p>[Commenter: O-14]</p>	<p>O-14-16</p> <p>Ecology agrees and added the following language to WAC 173-350-355(1):</p> <p>(d) The United States, the state of Washington, or any local government, or contractors hired by these entities, when involved in the cleanup or collection of waste tires, <u>This includes municipal contractors providing solid waste collection services under chapter 35.21 RCW, Miscellaneous provisions;</u></p>

<p>6. Moderate Risk Waste</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-12-05</p> <p>Existing Code Regulating <u>MRW Drum Storage Standards</u> May Impact MRW Facility Construction Costs and MRW Collection Costs</p> <p>Under the existing WAC 173-350-360(6)(a)VI, the 30-inch drum clearance rule greatly reduces available space for accumulating MRW, particularly at urban locations where space is limited. To comply, the MRW facility must increase the frequency of pickups or in some cases shut down due to lack of storage space. MRW facilities in urban areas also typically store MRW for limited duration (typically less than two weeks). As such, these facilities act as collection and transfer facilities and not as long term storage facilities. The 30-inch clearance rule should not apply to MRW storage areas when the drums are stored for no longer than 10 days. This would be consistent with the exemption for transportation facilities that store dangerous waste for up to 10 days while in transit.</p> <p>The rule adds program costs by requiring larger facilities, and/or increasing transport costs and greenhouse gas/energy consumption by requiring increased frequency of MRW pickup.</p> <p>SWD staff recommend the following language inserted:</p>	<p>A-12-05</p> <p>Ecology believes the requirement [WAC 173-350-360(6)(a)(iv)(F)] that drums containing MRW have at least one side with a minimum of thirty inches of clear aisle space is justified to allow for inspection of drums, removal of damaged drums if necessary, and emergency response. Variances can be issued on a case by case basis.</p> <p>This requirement is rooted in federal requirements for generators of hazardous waste, 40 CFR Part 262. Per the federal regulation, aisle space must be maintained to allow unobstructed movement during an emergency response. This federal requirement is echoed in Washington's dangerous waste regulations, specifically WAC 173-303-630, Use and Management of Containers, which applies to “all dangerous waste facilities that store containers of dangerous waste.” MRW is technically not dangerous waste only by virtue of the source or generator. A drum of MRW poses the same hazards as a drum of dangerous waste and the need to inspect, potentially remove a leaking or damaged drum, or respond to an emergency is the same.</p> <p>If a facility is operating as a permitted MRW facility, the 30-inch aisle space requirement is warranted. No changes were made to this requirement.</p>

<p>(vi) Containers of MRW shall be stored in a manner that allows for easy access and inspection. Drums containing MRW <u>stored for longer than 10 days</u> shall have at least one side with a minimum of thirty inches clear aisle space;</p> <p>[Commenter: A-12]</p>	
<p>A-12-04</p> <p><u>Issue #2: Existing Code Regulating Moderate Risk Waste Facilities –Design Standards May Require Significant Added Capital Expenditures</u></p> <p>SWD staff are concerned the regulations require significant capital expenditure on spill containment that does not seem to be justified based on the environmental/public health risk associated with handling limited quantities of household-type hazardous wastes for very short durations.</p> <p><u>Reference:</u> Regulation: 173-350-360</p> <p><i>“...5) Moderate risk waste facilities - Design standards.</i></p> <p>(a) The owner or operator of a moderate risk waste facility shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards. Each MRW facility shall:</p> <p>... (iii) Provide secondary containment to capture and contain releases and spills, and facilitate timely cleanup in areas where</p>	<p>A-12-04</p> <p>The secondary containment requirement to contain 20 minutes of flow from a fire suppression system is rooted in the International Fire Code (IFC), adopted in Washington via Chapter 51.54A WAC. However, WAC 173-350-360 goes beyond the IFC and requires the additional containment “where such suppression systems exist,” not just in areas where hazardous materials are stored.</p> <p>Ecology agrees that the requirements in WAC 173-350-360 should be more in line with the IFC and other state regulations for facilities that store hazardous materials (Chapter 173-303 WAC). However, some local fire codes may go beyond the IFC, and local fire officials may enforce a stricter standard. For this reason, Ecology changed the language in WAC 173-350-360(4)(a)(iii)(A)(III) to:</p> <p>"Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system in areas of the facility <u>as required by state and local fire or building codes.</u>"</p>

MRW is handled. All secondary containment shall:

(A) Have sufficient capacity to:

...(III) Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system, where such a suppression system exists”

Comment:

The requirement for containing 20 minutes of sprinkler discharge in areas “where MRW is handled” is overly broad and may be interpreted to cover areas that are not required by fire or building code to have this degree of containment. Under fire and building codes the requirement applies only to areas of the facility that are designated as a high hazard (H) occupancy and which store quantities of hazardous materials in excess of specified thresholds. Applying this overly broad requirement to customer unloading and sorting areas or to storage areas where the quantity of hazardous materials is limited does not appear necessary to protect public health or the environment, particularly if those areas are equipped with levels of secondary containment that meet the criteria of “greater than ten percent of the volume of all containers or the volume of the largest container, whichever is greater”.

The existing requirements under WAC 173-350-360 are stricter than those that apply to fully regulated ‘RCRA’ treatment and storage facilities (WAC 173-303-630). For example, there is no requirement under

<p>WAC 173-303-360 for containment of sprinkler discharge.</p> <p>At King County MRW facilities, customers are limited to containers of 5 gallons or less (with rare exception) and the types of materials handled are generally of low to moderate hazard. At our new Factoria facility in Bellevue, Washington, containment of 20 minutes of sprinkler discharge within the customer unloading area would require a containment system with over 20,000 gallons capacity, which is the approximate volume of a home swimming pool.</p> <p>We recommend that the regulation (173-350-360 (5) (a) (iii) (A) (III) be changed to read: “(III) Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system, where such a suppression system exists in areas of <u>the facility as required by the local fire or building code.</u>”</p> <p>Alternatively, the secondary containment requirements in WAC-173-303 could be adopted under WAC 173-350-360. While the Division does not advocate regulating MRW facilities to the same degree as RCRA facilities, in this instance compliance with the RCRA regulations would be less burdensome. Either way, it is easier for compliance and enforcement purposes if there are fewer different design standards to comply with.</p> <p>[Commenter: A-12]</p>	
A-07-02	A-07-02

<p>WAC 173-350-100 Definition for "Collection Event" would allow the Auburn HHW operation to be considered a collection event. The operation would not be required to obtain a solid waste handling permit. Most collection events have two or three events a year, unlike the Auburn HHW which is open every weekend year round. Is it acceptable to Ecology to have this operation handle Moderate Risk Waste without more affixed engineering controls? Because the operation is located in a loading dock area, the nearest downgradient drain is a storm drain and is only covered when the weather is dry as it cannot be covered during a rain event because it is meant to direct stormwater into the drain.</p> <p>[Commenter: A-07]</p>	<p>After examining definitions from other states, Ecology believes the revised definition of collection event sufficiently describes a collection event activity. Per WAC 173-350-360(2), Table 360-A, collection events must meet the performance standards of WAC 173-350-040, which require compliance with all other applicable local, state, and federal laws and regulations. If there were problems with stormwater at a collection event and the performance standards were not being met, the event would not be meeting the conditions for exemption and a permit could be required.</p>
<p>A-21-06</p> <p>Section 360 - Moderate Risk Waste Permit Requirements:</p> <p>Section 173-350-360 (6) (a) (ii) (F): <i>Containers of MRW are stored in a manner that allows for easy access and inspections. Drums containing MRW must have a least one side with a minimum of 30 inches of clear aisle space.</i></p> <p>SPU recommends differentiating Hazardous Treatment, Storage and Transfer Station Disposal (TSD) Facilities from Household Hazardous Waste (HHW) collection sites operated by local governments. HHW collection sites typically have limited space and are not set up for long-term storage purposes. SPU accepts HHW from the residents, containers are packed until full and drums are then shipped off to a TSD facility within a short period of time, typically around 10 days. The 30-inch clearance requirement for clear aisle space can pose space constraints and should not</p>	<p>A-21-06</p> <p>Ecology believes the requirement [WAC 173-350-360(6)(a)(iv)(F)] that drums containing MRW have at least one side with a minimum of thirty inches of clear aisle space is justified to allow for inspection of drums, removal of damaged drums if necessary, and emergency response. Variances can be issued on a case by case basis.</p> <p>This requirement is rooted in federal requirements for generators of hazardous waste, 40 CFR Part 262. Per the federal regulation, aisle space must be maintained to allow unobstructed movement during an emergency response. This federal requirement is echoed in Washington's dangerous waste regulations, specifically WAC 173-303-630, Use and Management of Containers, which applies to "all dangerous waste facilities that store containers of dangerous waste." MRW is technically not dangerous waste only by virtue of the source or generator. A drum of MRW poses the same hazards as a drum of dangerous waste and the need to inspect, potentially remove a leaking or damaged drum, or respond to an emergency is the same.</p>

<p>pertain to municipal HHW collection sites particularly if the facility has secondary containment. The 30-inch rule is based on federal requirements for storage of dangerous and extremely dangerous waste for an extended time sometimes more than one year. Municipal household hazardous waste collection sites more resemble the proposed permit exempt "limited moderate risk waste facilities" category (which in Ecology's definition only take batteries, waste oil and waste antifreeze) than TSD operations.</p> <p>Ecology should consider creating another permit category for Household Hazardous Waste collection sites with very short retention time of containers (10 days or less) to differentiate them from TSD facilities in the permitting structure. Such facilities would need to be permitted (in contrast to the proposed "limited moderate risk waste" facilities) since they receive a wide variety of HHW from residents. The permit requirements should include an operations plan, personnel training, container labeling, flammable vapor monitoring systems, secondary containment features, reporting and notification of spills. Flexibility should be allowed regarding the 30-inch rule, since it greatly reduces the available space for drums which are going to be shipped off site quickly once filled. Such a modification would be beneficial in reducing public program costs and keeping HHW out of solid waste landfills.</p> <p>[Commenter: A-21]</p>	<p>If a facility is operating as a permitted MRW facility, the 30-inch aisle space requirement is warranted. Creating a new permit category with most of the same requirements as exists in the previous version of the rule, except the 30-inches of aisle space, based solely on the premise that the waste is stored for short duration, is unnecessary. The rule already provides accommodation for facilities storing MRW for 10 days or less in WAC 173-350-360(1), Applicability.</p>
<p>A-16-07</p> <p>-100 "limited MRW facility". Add to the end -- "take-back centers that abide by performance</p>	<p>A-16-07</p> <p>Adding "product take-back centers that abide by performance standards in section -040" to the definition of "limited MRW facility" represents a</p>

<p>standards in section-040." This would help with oil collectors, fluorescent tube collectors etc.</p> <p>[Commenter: A-16]</p>	<p>substantial definitional change. Early in the rule process, the MRW workgroup (formed as part of the rule process) explored changing the definition of "limited MRW" to include more items (by definition "limited MRW" is limited to used oil, antifreeze and batteries), but ultimately rejected the idea.</p> <p>Adding product take-back centers to the definition of "limited MRW" would also increase the regulatory oversight of product take-back activities. In WAC 173-350-360(2), Table 360-A, which identifies the terms and conditions for permit exemption, limited MRW facilities have more requirements that must be met than product take-back centers. This was done intentionally to encourage collection at product take-back centers. There are fewer requirements for product take-back centers because the retailer has some familiarity with the materials they sell, so they will have basic knowledge when that product comes back as a waste. If Ecology added take-back centers to the definition of limited MRW facility, product take-back centers would have to meet all the conditions listed for limited MRW facility in order to be permit exempt. This would discourage collection at product take-back centers.</p> <p>In WAC 173-350-360(2), Table 360-A, item (b), both limited MRW facilities and product take-back centers must meet the performance standards of WAC 173-350-040, there is no need to add this requirement to the definition.</p>
<p>A-16-13</p> <p>-360(6)(a)(v)(A) Routine inspections must be conducted.....approved by the jurisdictional health department. Remove "as part of the permitting process". This allows a facility more flexibility</p> <p>[Commenter: A-16]</p>	<p>A-16-13</p> <p>Changes to the inspection schedule must be included in the facility operations plan and require approval through the permit modification process. Permit modifications can be made at any time, and are considered part of the permitting process.</p>

<p>7. Recycling & Material Recovery</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-14-04</p> <p>"Material recovery facility" means any facility that collects, receives, compacts, repackages, or sorts, or processes for transport source separated solid waste for the purpose of recycling.</p> <p>Comment: Does a material recovery facility also receive <u>Non</u> source separated material for the purpose of recycling?</p> <p>[Commenter: B-14]</p>	<p>B-14-04</p> <p>By definition, a material recovery facility receives source separated solid waste. A transfer station can remove recyclables from non-source separated solid waste under a permit.</p>
<p>B-14-07</p> <p><u>WAC 173-350-210 Table 210-A Terms and Conditions for Solid Waste Permit Exemption</u></p> <p><u>(c) Dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, and five percent by weight per load;</u></p> <p>Comment: This number has been reduced from 10% per load. Although this language is intended to distinguish when a facility needs to obtain a permit, this language is routinely used by other agencies and counties with flow control to determine when a load of recyclable material actually constitutes as load of garbage (regulated solid waste haul).</p>	<p>B-14-07</p> <p>Ecology clarified in the concise explanatory statement that the five percent standard for permit exemption is not the standard for determining what is or is not source separated solid waste.</p>

<p>This usage has had a negative impact on recycling, therefore the language should be revised to insure and make clear that this language is not to be utilized for such purpose.</p> <p>[Commenter: B-14]</p>	
<p>B-14-08</p> <p>WAC 173-350-210 Recycling and material recovery facilities. (And many other sections of the proposed rule)</p> <p><u>(4) Recycling and material recovery facilities – Permit requirements - Design.</u></p> <p><u>Recycling and material recovery facilities must be de-signed so that the facilities can be operated to meet the performance standards of WAC 173-350-040. The owner or operator of a recycling or materials recovery facility must prepare engineering reports/plans and specifications to address the following design standards:</u></p> <p>Comment: The underlined language here is also similarly used in several locations throughout the document (section 310 et al) and should be revised to make it clear that the Jurisdictional Health Department has the discretion to determine which elements of the facility need engineering.</p> <p>On many elements of a facility, standard construction practices and/or those permitted through local permitting provide sufficient safeguards. Duplicating the review of structures that require local building permits is not cost effective. Obtaining engineering on existing structures or slabs can be very expensive and not</p>	<p>B-14-08</p> <p>Ecology agrees that in many cases, there may be no value added by performing an engineering analysis of an existing element of a solid waste facility, where the solid waste handling standards do not establish specific design criteria for that element. However, where an existing element is subject to specific design criteria, an engineering analysis of that element may be warranted.</p> <p>For example, if a facility operator proposed to permit a storage pile for handling a leachable solid waste on an existing paved area, the paved area should be evaluated for its ability to meet the design criteria of WAC 173-350-320. Those criteria include an analysis of the pavement surface under the stresses expected during operations, and the design of the surface water management systems including run-on prevention and runoff conveyance, storage, and treatment. Since these analyses involve engineering principles and judgment, an engineering report would be warranted as part of the permit documentation submittal.</p> <p>Ecology also agrees that standard construction practices and local development permit review for compliance with relevant codes can provide sufficient safeguards for some elements of many types of solid waste handling facilities.</p> <p>For example, a typical pre-engineered metal building used to house a moderate risk waste facility may not warrant a specific engineering analysis to be submitted to the permitting jurisdictional health department to establish compliance with the solid waste handling standards; that evaluation might be</p>

<p>necessary to protect human health and the environment. Concrete slabs and roadways, ecology block bunkers, pre- manufactured drainage structures/vaults are features that likely do not need engineering.</p> <p>During the public hearing on these proposed changes, Staff made clear the language requiring engineering reports / plans and specifications were applied throughout the document for “consistency” and further noted that engineering is not always required but is at the direction of the permitting agency. This language, and as printed elsewhere within the document, needs to be revised to reduce the financial burden on facilities as described in the Preliminary Regulatory Analysis for this rule.</p> <p>[Commenter: B-14]</p>	<p>left to the local building permitting authority. However, any secondary containment features installed within the facility because of the design criteria of WAC 173-350-360 would warrant an engineering analysis for compliance with the solid waste handling standards.</p> <p>Ecology revised the language to remove the implicit requirement to prepare an engineering report to address all elements of the design requirements when some elements don't necessarily require engineering. The general design standards for each type of facilities state that they "... must be designed so that the facilities can be operated to meet the performance standards of WAC 173-350-040, and to also meet the following design standards...".</p> <p>Ecology also revised the documentation submittal requirements to clarify the scope of the documentation to "...any proposed addition or modification of elements...". The scope of the requirement that such documentation be prepared by a professional engineer has been narrowed to "...facility drawings and construction documents for proposed construction of engineered features...".</p> <p>Ecology believes that the language in the documentation subsection for each type facility should be sufficient to guide jurisdictional health departments in facility-specific decisions regarding the need for engineering reports for those elements which do require engineering.</p>
<p>B-14-09</p> <p>WAC 173-350-210 (5) Recycling and material recovery facilities Permit requirements Documentation</p> <p>Comment: Similarly to subsection (4) of this section and elsewhere within the document, substantial engineering is proposed to require for the layout/ design and facility features along with scale</p>	<p>B-14-09</p> <p>Please see the response to comment B-14-08.</p>

drawings and construction quality control and construction monitoring documentation. This proposal will add, at a minimum, 20% or more to the cost of a facility. This language, and as printed elsewhere within the document, needs to be revised to reduce the financial burden on facilities as described in the Preliminary Regulatory Analysis for this rule.

To further the discussion on the aforementioned:

Ecology Responsiveness Summary to previous comments provided the following:

***Ecology Remark:** The requirement for a quality assurance plan for constructed elements of a proposal for permitted facilities is implicit in the current rule. The addition of a requirement for a Construction Quality Assurance plan just makes obvious what would already be required for engineering approval as required in WAC 173-350-715(2). Language requiring a CQA plan for permitted facilities already exists in these sections:*

- *_320 - Piles used for storage or treatment*
- *_330 - Surface impoundments and tanks*
- *_360 - Moderate risk waste handling*
- *_400 - Limited purpose landfills*

The proposed language establishes a new requirement for a CQA plan for permitted facilities in these sections:

- *_210 - Recycling and material recovery facilities*
- *_240 - Energy recovery and incineration facilities*
- *_310 - Transfer stations and drop box facilities*
- *_410 - Inert waste landfills.*

Additional Ecology Remark / Response on same subject:

Response: *The requirements for submittal, review, and approval of engineering documents in Sections 320, 400, and 410 are not new. The adopted rule language already includes functionally similar requirements. See WAC 173-350-320(3)(a), WAC 173-350-320(8)(b), WAC 173-350-320(9), WAC 173-350-330(3)(a), WAC 173-350-330(3)(b), WAC 173-350-330(8)(a), WAC 173-350-330(9), WAC 173-350-410(3), and WAC 173-350-410(8)(a). Section 360 has similar requirements for submittal of engineering documents. We adopted similar submittal requirements in Sections 220 and 250 during a previous update of the Solid Waste Handling Standards.*

Comment: *Ecology response seems to imply that existing language (or implied language) is somehow protected from revision. This language needs to be changed to reflect the directives of the legislation*

<p>and those identified in the Preliminary Regulatory Analysis for this rule that clearly seek to break down barriers for recycling and burdensome regulation. Again, staff made clear at the public hearing that engineering requirements are flexible based upon specific needs of a proposed facility and are at the direction of the permitting agency. The current language does not reflect this and needs to be changed.</p> <p>[Commenter: B-14]</p>	
<p>B-01-05</p> <p><u>Duplicate Jurisdiction:</u> Table 210-A (2) provides the specific exemption requirements for facilities recycling concrete. Specifically, this requires any facility recycling concrete for re-sale to allow inspections by the jurisdictional JHD as well as annual throughput reporting. <u>There are many concrete plants that accumulate return concrete, crush and resell this material. BUT do not accept concrete from outside sources.</u> These facilities are not currently under JHD jurisdiction and this rule represents a change in reporting obligations. These same facilities are also subject to the Piles section of the rule, but will receive Piles Permit exemptions when the facility has a Sand and Gravel General Permit. In these cases, there is no need for both the JHD and the Department of Sand and Gravel Permit Inspector to inspect and regulate the site. Both agencies would be regulating the same things (pile condition, pile runoff, pile staging etc.) and therefore is redundant. The Agency should amend the proposed rules so that only one agency (Ecology) has jurisdiction in the above-mentioned situation. Table 210a could be</p>	<p>B-01-05</p> <p>Please see response to comment O-09-05.</p> <p>Ecology does not have the authority through this rule to usurp the regulatory oversight of any and all agencies with powers provided by the state legislature. Ecology cannot amend the rule to give primacy.</p>

<p>modified to include a footnote which says, "In the case where Facilities have Sand and Gravel General Permits the Department has primary jurisdiction."</p> <p>[Commenter: B-01]</p>	
<p>A-12-12</p> <p>WAC 173-350-100 "Commingled recyclables..."</p> <p>This definition is good but what term shall we now use to describe when recyclables and waste are mixed together? This has sometimes been termed "commingled" and sometimes "mixed". Perhaps we need to have "mixed recyclables and waste" in the definitions and clarify that this would be considered solid waste.</p> <p>[Commenter: A-12]</p>	<p>A-12-12</p> <p>The proper term for mixed recyclables and non-recyclables is solid waste. As recyclable materials are a subset of solid waste under statute (Chapter 70.95 RCW), Ecology does not need to clarify that recyclable materials mixed with solid wastes are solid waste.</p>
<p>A-21-05</p> <p>Section 220 - Recycling and Material Recovery Facilities</p> <ul style="list-style-type: none"> • Would a facility receiving source separated asphalt shingles for indoor processing qualify for a permit exemption under this section assuming they comply with performance standards and reporting requirements? <p>[Commenter: A-21]</p>	<p>A-21-05</p> <p>The commenter's interpretation is correct.</p>
<p>A-06-11</p> <p>Subsection (4)(e) – The words "tip floor" are used in this subsection and therefore should be defined in the "Definition</p>	<p>A-06-11</p> <p>Please see response to comment O-06-10.</p>

<p>Section” of the rule. Alternatively, the words “receiving area” could be used to more accurately describe that all incoming waste (tip floor and staging areas) to a facility must be conducted on an impervious surface.</p> <p>Subsection (4)(f) – The words “tipping floor” are used in this subsection and therefore should be defined in the “Definition Section” of the rule. The definition should encompass that other temporary storage areas of incoming wastes need to be protected from precipitation, not just the active tipping floor itself. Alternatively, the words “receiving area” could be used to more accurately describe that all incoming waste (tip floor and staging areas) to a facility must be covered to protect wastes from precipitation. This clarification is necessary to jurisdictional health departments because there may be existing MRF’s that stage incoming commingled bales of recyclables outside of the “tipping floor” of the facility until such time as they can be processed through the facility.</p> <p>[Commenter: A-06]</p>	
<p>A-06-12</p> <p>Table 210-A (2) – The TPCHD strongly recommends that the rule requires that 50% of the materials be recycled annually and setting an upper quantity limit under the “Specific Requirements for Activity or Operation”. This would provide the jurisdictional health departments the necessary tools to monitor such operations</p>	<p>A-06-12</p> <p>Ecology had not imagined that materials would remain un-recycled at a recycling or material recovery facility for months or years at a time. Certainly if these materials were stored outdoors in piles, the piles section would apply, and likely trigger permitting. However, as the piles standards do not apply to indoor piles at recycling and material recovery facilities, Ecology sees the value of having an annual processing requirement to avoid indefinite speculative accumulation. Ecology added this requirement to WAC 173-350-210(2), Table</p>

<p>to prevent the abuse of this exemption category.</p> <p>[Commenter: A-06]</p>	<p>210-A, as recommended. As to upper onsite quantity limits, that is more problematic. Not all materials pose the same risks to human health and the environment, and arbitrarily setting a volume limit for all materials could restrict legitimate recycling. Again, materials in outdoor piles are still subject to the piles standards which in some cases have volume limits.</p>
<p>A-09-01</p> <p>Please address efforts to protect waters of the state from equipment cleaning and washdown water by updating WAC 173-350-210(4)(h) to Provide pollution control measures to protect surface and ground-waters, including runoff collection and discharge designed to handle a twenty-five-year storm as defined in WAC 173-350-100, and equipment cleaning and washdown water.</p> <p>[Commenter: A-09]</p>	<p>A-09-01</p> <p>Ecology added language to WAC 173-350-210(4)(g), clarifying that any areas likely to receive wash down water must be managed to protect stormwater.</p>
<p>A-09-02</p> <p>Please address efforts to protect waters of the state from equipment cleaning and washdown water by updating WAC 173-350-210(4)(i) to Conduct equipment cleaning and washdown operations under cover or in a bermed impervious area to prevent commingling of washdown water with stormwater. Discharge washdown water to sanitary sewer if possible. Discharge of washdown water must not cause or contribute to a violation of Groundwater Quality Standards (Chapter 173-200 WAC), Surface Water Quality Standards (Chapter 173-201A WAC), or Sediment Management Standards (Chapter 173-204 WAC) of the State of Washington.</p> <p>[Commenter: A-09]</p>	<p>A-09-02</p> <p>Please see response to comment A-09-01.</p>

<p>O-10-02</p> <p>[Oral testimony] And I also want to briefly comment on the recycling and material recovery facility section. Changes that limit the scope of the permit exemptions in this section are a good first step in addressing longstanding issues with exempt facilities.</p> <p>First, 173-350-210(2) states that a facility that does not comply with the terms of its exemption may be subject to permitting requirements. This should be changed to must become permitted or cease operation, in order for the rule to have any real effect. We understand that the department first offers technical assistance to bring entities into compliance. However, if they fail to achieve compliance within a reasonable but limited timeline, the rule needs to specify these facilities must also obtain a permit or close.</p> <p>Second, the exemption table should also reference the Transporter Law and require compliance as a condition of permit exemption.</p> <p>Overall, we support the changes in this section to limit the scope of the exemption, but without an accurate list of the effected entities, or an accurate listing of the existing facilities in Washington even, we are unable to fully support or understand the scope of these changes. And we will also submit detailed comments that elaborate on the discussion here and other issues. Thanks for the opportunity to comment.</p> <p>[Commenter: O-10]</p>	<p>O-10-02</p> <p>Please see response to comment B-16-05 and comment O-05-08.</p>
<p>O-14-08</p> <p>Regarding the most recent rule proposal, we support, to an extent, the clarification in the titles and organization of section 173-350-210 & 310, changing 210 "recycling" facilities to "recycling and material recovery facilities" and</p>	<p>O-14-08</p> <p>Most stakeholders preferred combining these two standards, particularly as many material recovery facilities (MRFs) will be able to produce</p>

<p>310 "intermediate solid waste handling facilities" to "Transfer stations and drop box facilities." However, we believe that recycling facilities and MRFs should remain in their own distinct chapters to further clarify that the primary sorting, bundling, and processing activities of a MRF are distinct from the actual recycling that occurs at a recycling facility. Commendably, the rule update clarifies this distinction in the definition of recycling and WAC 173-350-110. Recycling facilities and MRFs should have their own distinct sections to support the distinction between sorting and recycling drawn elsewhere in the rule.</p> <p>[Commenter: O-14]</p>	<p>commodities, and so will both be engaged in material recovery and recycling.</p>
<p>O-14-09</p> <p>The update to WAC 173-350-210 Recycling and Material Recovery Facilities appears to take some steps to shrink the scope of the exemption, though it's not clear what practical effect the changes will have. For example, 173-350-210(2)(a)(ii) requires that an exempt facility:</p> <p>Accept only source separated waste materials segregated into individual material streams for the purpose of recycling, processing, baling, or repackaging for use other than disposal or incineration...</p> <p>173-350-210(2)(a)(iii) notes that:</p> <p>Examples of individual material streams are loads composed solely of cardboard, mattresses, or glass of one type or several types. More than one individual material stream may be accepted at the same facility, but mixed waste materials, including comingled recyclable materials <u>such as construction and demolition materials</u>, may not be accepted under this exemption;</p> <p>First, as added above, we believe the rule should specify that mixed C&D materials do not</p>	<p>O-14-09</p> <p>No facilities processing comingled loads are eligible for exemption under the rule, including mixed C&D.</p>

<p>qualify as an individual material stream for purposes of this rule, only a box of entirely clean wood or some other material could qualify. Source separation is key in this area. Historically, C&D facilities have proven to be the most problematic exempt facilities, offering avenue's for cheap disposal and sham recycling under the cover of recycling, operating more like a transfer station than a MRF or recycling facility. Due to that context, we initially viewed this change as a step in the right direction toward eliminating the most problematic exempt facilities, which often take a mix load of largely garbage, often highly contaminated C&D, claim to haul it as recycling and ultimately dispose of the bulk of the contents.</p> <p>[Commenter: O-14]</p>	
<p>O-14-10</p> <p>Since our optimism with the original draft which specified exempt MRFs could only accept individual material streams, we have heard from staff that this change would likely only effect several facilities in the state, perhaps 6 at the most. Again, it's impossible for the industry or WRRRA to offer meaningful comments without some idea of the facilities effected by the changes. As the amount of facilities affected by this change is apparently small, and apparently already identified, WRRRA formally requests DOE to provide information naming potentially effected entities by these changes.</p> <p>[Commenter: O-14]</p>	<p>O-14-10</p> <p>Please see response to comment O-15-15.</p>
<p>O-14-11</p> <p>The draft also alters "5% and 10% rule" for exempt facilities, by changing the unit of measurement from weight to volume in 173-350-210(2)(a)(iii). The rationale behind this change is unclear. In some circumstances,</p>	<p>O-14-11</p> <p>Please see response to comment O-05-07.</p>

<p>volume may provide a useful measurement, such as visual inspection. However, weight is an inherently more precise measurement that is easily recorded and documented for recordkeeping purposes, such as Transporter Law records. Everything in the solid waste industry is weighed at some point, weight should be kept in the rule as the more accurate measurement. The rule should not eliminate weight in favor of volume, but provide for the consistent use of both units of measurement.</p> <p>[Commenter: O-14]</p>	
<p>O-15-16</p> <p>First and foremost, in the current draft, WAC 173-350-210(2) states that an exempt facility <i>may</i> be subject to permitting requirements if it violates the terms of its exemption. The "may" in the section must be changed to "shall" or "will" to both comply with statutory authority in RCW 70.95.305 and to provide the regulation with any real chance of effective enforcement. Our understanding is that the Department provides technical assistance and attempts to bring operators into compliance before seeking enforcement. Violators should be subject to penalty, but to accommodate these competing concerns, the period to achieve compliance should be confined to a 30 day window.</p> <p>If a facility does not operate In compliance with the terms and conditions established for an exemption under this subsection, the facility may <u>shall</u> be subject to the permitting requirements for solid waste handling under this chapter <u>after 30 days</u> (Italics added).</p> <p>This change provides operators with a reasonable but rightly limited time to receive technical assistance from the Department and achieve compliance. If the operators continue illegal activity for more than 30 days, they</p>	<p>O-15-16</p> <p>Please see response to comment B-16-05 and comment B-10-12.</p>

<p>must, and rightly so, become permitted to continue operation.</p> <p>[Commenter: O-15]</p>	
<p>O-15-19</p> <p>WRRRA also supports adjusting the "5% annually / 10% by load residuals" rule for exempt facilities to 5% across the board. This change removes ambiguity and should provide for better enforcement.</p> <p>[Commenter: O-15]</p>	<p>O-15-19</p> <p>Comment noted.</p>
<p>O-15-24</p> <p>Recycling and Material Recovery Facilities Comments Summary:</p> <p>Overall rules changes are positive but must go farther in key areas to achieve goals</p> <p>[Commenter: O-15]</p>	<p>O-15-24</p> <p>Comment noted.</p>
<p>O-05-07</p> <p>WAC 173-350-210 Recycling and Material Recovery Facilities.</p> <p>The rule proposal makes some progress in addressing longstanding issues caused by a lack of enforcement and oversight of recycling facilities. The change to require permits for any facility accepting commingled recyclable materials is a positive change in limiting the scope of this problematic exemption. WRRRA supports this change and views it as a key component of this rule proposal. WRRRA also supports the change from the old "5%/10%" limit for recycling residuals to a clear and consistent 5% by weight. Earlier drafts of the</p>	<p>O-05-07</p> <p>Ecology changed the language in WAC 173-350-210(2), Table 210-A, item(3)(c) to allow contamination to be measured by weight or volume.</p>

<p>rule proposed changing the measurement to 5% by volume, but ultimately reverted back to weight. Weight is an inherently more precise measurement that is easily recorded and documented for recordkeeping purposes, such as Transporter Law records, and should not be abandoned. However, volume may also provide a useful measurement in certain situations, such as visual inspection of a container. The rule should not eliminate weight in favor of volume, but provide for the consistent use of both units of measurement.</p> <p>[Commenter: O-05]</p>	
<p>O-05-09</p> <p>WAC 173-350-210(2) states that an exempt facility <i>may</i> be subject to permitting requirements if it violates the terms of its exemption. The “may” should be changed to “shall” or “must” to both comply with statutory authority in RCW 70.95.305 and to provide the regulation with any real chance of effective enforcement. Violators should be subject to penalty, with a 30 day window to bring violations into compliance:</p> <p>...If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may <u>shall</u> be subject to the permitting requirements for solid waste handling under this chapter <u>after 30 days</u>. (Italics added).</p> <p>This change provides operators with a reasonable but rightly limited time to receive technical assistance from the Department and achieve compliance. If the operators continue illegal activity for more than 30 days, they</p>	<p>O-05-09</p> <p>Please see response to comment B-16-05 and comment B-10-12.</p>

<p>must, and rightly so, become permitted to continue operation.</p> <p>[Commenter: O-05]</p>	
<p>B-16-04</p> <p>WAC 173-350-210 Recycling and Material Recovery Facilities.</p> <p>The draft Rule addresses some longstanding issues caused by a lack of enforcement and oversight of recycling facilities. The change to require permits for any facility accepting commingled recyclable materials is a positive change in limiting the scope of this problematic exemption. WCI supports this change and views it as a key component of this rule proposal. WCI also supports the change from the old "5%/10%" limit for recycling residuals to a clear and consistent 5%.</p> <p>[Commenter: B-16]</p>	<p>B-16-04</p> <p>Comment noted.</p>
<p>B-16-05</p> <p>WAC 173-350-210 Recycling and Material Recovery Facilities.</p> <p>b. WAC 173-350-210(2) states that an exempt facility may be subject to permitting requirements if it violates the terms of its exemption. The "may" must be changed to "shall" or "will" to both comply with statutory authority in RCW 70.95.305 and to provide the regulation with any real chance of effective enforcement. Violators should be subject to penalty, with a 30 day window to bring violations into compliance: If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may shall be subject</p>	<p>B-16-05</p> <p>Jurisdictional health departments have indicated they prefer the flexibility of "may" be required to get a permit. For instance, they are not interested in requiring a permit for an exempt facility that is 45 days past due for their annual report. They have indicated they would rather have Ecology use the enforcement mechanisms available in statute for exempt facilities in some cases, instead of reverting automatically to permitting.</p> <p>Please see response to comment B-10-12.</p>

to the permitting requirements for solid waste handling under this chapter after 30 days.

[Commenter: B-16]

<p>8. Transfer Stations & Drop Box Facilities</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-14-03</p> <p>"Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities receive waste from off-site, <u>require waste placement directly into a container and not a tip floor, and serve the general public and not route collection vehicles.</u></p> <p>Comment:</p> <p>Propose deleting the following added language <u>and serve the general public and not route collection vehicles.</u></p> <p>It the material is dropped directly into a container and it can be demonstrated to have no environmental impact the practice should be allowed.</p> <p>In some circumstances, tipping from a commercial collection vehicle into a drop box is all that is practical due to available revenue and/or frequency</p> <p>[Commenter: B-14].</p>	<p>B-14-03</p> <p>Ecology removed reference to route collection vehicles in the definition of “drop box facility.”</p>
<p>B-14-05</p> <p>"Transfer station" means a ((permanent, fixed, supplemental collection and transportation)) facility ((, used by)) that receives solid waste (e.g., municipal solid</p>	<p>B-14-05</p> <p>Transloading of source separated recyclable materials would still fall under the material recovery facility standards and transload of non-source</p>

<p>waste, contaminated soil, or other solid wastes) from off-site from persons ((and)) or route collection vehicles ((to deposit collected solid waste from off-site into a larger)) for consolidation into transfer vehicles, vessels, or containers for transport to a solid waste handling facility.</p> <p>Comment: With the elimination of intermediate solid waste handling facility standards and limitation on conditional exemptions, will simple trans-load facilities for co-mingled recyclable materials now have to be permitted as a transfer station? This may have a profound impact on recycling in that collection vehicles may need to transport directly to recycling facilities rather than consolidating for bulk shipment. This can have a negative impact on recycling and negative environmental impact.</p> <p>[Commenter: B-14]</p>	<p>separated solid waste would fall under transfer stations.</p>
<p>B-14-12</p> <p><u>WAC 173-350-310 Transfer stations and drop box facilities</u></p> <p>Comment: This section applies similar engineering and construction documentation requirements as discussed previously in Section 210 comments.</p> <p>Comment: With the removal of intermediate solid waste handling facilities, and by way of definition this section will regulate simple trans-load stations where materials are consolidated for transportation efficiencies. This can occur in a building with concrete floor. This section should make permit exemption, engineering and design allowances for low or no threat operations.</p>	<p>B-14-12</p> <p>Transloading is waste transfer. That is what happens at a transfer station. If the waste transfer is recyclable materials, then that meets the definition of material recovery. There was no broad exemption under the previous version of the rule for transload facilities, and Ecology did not think it appropriate to add one, but some facilities may qualify for a permit exemption. Under the adopted rule, transload facilities will be permitted as transfer stations or material recovery facilities (MRFs), depending on the waste type, or for individual streams of recyclable materials, may qualify for a permit exemption.</p>

<p>[Commenter: B-14]</p>	
<p>A-17-06</p> <p>Transfer Stations & Drop Box Facilities (WAC173-350-310(8)(a)) have reduced the notification of closure from 180 days to 90 days. Why is this not universal to include other facilities (i.e. MRW WAC173-350-360(8)(a)(i))? (NOTE: closure of a transfer station would have far greater implications on our community with only 90 days notice of closure than an MRW facility).</p> <p>[Commenter: A-17]</p>	<p>A-17-06</p> <p>The purpose of the closure notification is to ensure that regulatory agencies have adequate time to review closure plans. That does not prevent the local solid waste management authority from notifying the community much farther in advance of an intended facility closure. Notification of closure requirements vary from facility type to facility type, ranging from 60 - 180 days, depending on the complexity of the facilities and materials they handle. Ecology believes the 180 day notification for MRW facilities is warranted due to the hazardous nature of the materials they handle. Ecology expects the closure of transfer stations and drop box facilities to typically be less complex.</p>
<p>A-12-07</p> <p>Other Comments:</p> <p>In addition to the major issues listed above, SWD staff also identified other definitions and sections within the proposed revisions that required clarification. All SWD staff comments are included below.</p> <p>Inconsistent code structure:</p> <p>WAC 173-350-310 (6) ... The owner or operator of a transfer station or drop box facility must: ...</p> <p>(a) Operate the site in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation...</p>	<p>A-12-07</p> <p>The difference in WAC 173-350-310(6) is that there are two different facility types. WAC 173-350-310(6)(a) applies to both transfer stations and drop boxes. WAC 173-350-310(6)(b) specifies additional requirements for transfer stations. WAC 173-350-360(6)(c) specifies additional requirements for drop box facilities.</p> <p>To the extent possible, Ecology provided consistent subsection structure throughout the rule.</p>

<p>(b) For transfer stations, the plan of operations must also address how the operators will: this follows from (a) which mentions the plan of operations rather than (6) as the hierarchy would indicate. Should be able to directly read (b) after (6) and have it make sense.</p> <p><i>Suggested correction of structure:</i></p> <p>(6)(a) Operate the site in compliance with the performance standards of WAC 173-350-040 and this subsection.</p> <p>(6)(b) Develop, keep, and follow a plan of operation...</p> <p>(6)(c) Prepare and submit an annual report....</p> <p>[Commenter: A-12]</p>	
<p>A-12-08</p> <p>WAC 173-350-310 (6)(a)(iv)(E) Ensure that waste capable of attracting birds does not pose an aircraft safety hazard.</p> <p><i>Concern:</i></p> <p>As written it states that waste is the aircraft safety hazard rather than the birds.</p> <p>It is also regulatory overreach creating legal risk and liability to operators to provide absolute control over facility airspace.</p>	<p>A-12-08</p> <p>Ecology clarified language in WAC 173-350-310(6)(a)(iv)(E) that the birds are the aircraft safety hazard, not the waste itself. This is a long established standard and reflects similar requirements in federal rules.</p>

<p>It is already regulated in (6)(a)(iv)(B) with operator responsibility to control vectors (aka birds).</p> <p>[Commenter: A-12]</p>	
<p>A-12-09</p> <p>WAC 173-350-310 (6)(b)(i) (the plan of operations must also address how the operators will)</p> <p>Prove attendant(s) are on-site during hours of operations;</p> <p><i>Concern:</i></p> <p>Regulatory intent is not clear. Presumably it is for transfer stations to be staffed during hours of operation. However, stating operators will “prove” attendant(s) are on-site needs clarity as to what type or level of “proof” is sufficient.</p> <p>[Commenter: A-12]</p>	<p>A-12-09</p> <p>Ecology corrected this typing error, change “prove” to “provide” in WAC 173-350-310(6)(b)(i).</p>
<p>A-12-10</p> <p>WAC 173-3350-310 (6)(c) For drop box facilities, the plan of operations must also address how the operators will service the facility as often as necessary to ensure adequate dumping capacity at all times.</p> <p><i>Concern:</i></p> <p>Intent is unclear: “how” and “as often as necessary” are separate concepts of operations that do not provide clarity as to the expectation for the operating plan (is</p>	<p>A-12-10</p> <p>Ecology believes the intent is clear. Certainly closing the facility and rerouting customers when the facility has reached capacity is the type of contingency planning Ecology expects to see written into a plan of operations, which is tailored to the needs of the given site.</p>

<p>including staffing plans and work schedules in the operating plan the expectation?).</p> <p>It is also regulatory overreach with respect to requiring operators to “ensure adequate dumping capacity at all times.” Conditions may arise in which a facility could reach capacity and the proper operator response would be to divert further waste acceptance and close the facility to guard against “storage of waste outside the drop box”—which is presumably the whole point of this language.</p> <p>[Commenter: A-12]</p>	
<p>A-12-20</p> <p>WAC 173-350-310.4.b.2 Detached containers used at drop box facilities are provided by the hauler that is awarded franchise rights for a given geographic region by the WA UTC. Owners/operators have no authority to require franchise haulers to comply with this requirement, putting owners and operators in a difficult position if the detached containers do not meet these criteria.</p> <p>[Commenter: A-12]</p>	<p>A-12-20</p> <p>Ecology added an option to place containers, whose water-tightness cannot be assured, on an impervious surface in WAC 173-350-310(4)(b)(ii).</p>
<p>A-07-06</p> <p>WAC 173-350-210 (6)(a)(iv)(C): Please specify what is considered "hours of operation." Some transfer stations have waste deposited after public access hours and there is no attendant on-site, but have 24-hour surveillance cameras of the tipping floor. Would the 24-hours surveillance cameras suffice?</p>	<p>A-07-06</p> <p><i>[Note: The comment appears to be about transfer stations, which in the adopted rule is WAC 173-350-310.]</i></p> <p>Ecology added language to WAC 173-350-310(6)(b)(i) specifying that materials may be transferred after hours if other controls approved by the jurisdictional health department are in place.</p>

<p>[Commenter: A-07]</p>	
<p>A-06-15</p> <p>Section -310 Transfer stations and drop box facilities</p> <p>Subsection (4)(a)(v) – The TPCHD recommends clarifying “tip floor” to include all areas of the facility that accept, store, and process waste materials. Alternatively, TPCHD suggests using the words “receiving area”.</p> <p>Subsection (4)(a)(vi) – The TPCHD suggests changing “tipping floor” to “receiving area” or define “tipping floor” in the definition section to encompass all areas where wastes are managed at the facility. The rule should also provide more clarity on how this requirement applies to transfer stations and drop boxes where wastes received by the public are being <u>directly</u> deposited into transfer trailers or drop boxes. In other words, is there a “tipping floor” in these circumstances? Should the waste being dumped in these open trailers and drop boxes be protected from precipitation? If so, the rule should be clarified to encompass these circumstances.</p> <p>[Commenter: A-06]</p>	<p>A-06-15</p> <p>Please see response to comment A-06-10.</p>
<p>A-06-20</p> <p>Subsection (6)(b)(iv) – The TPCHD recommends clarifying “tipping floor” to include all receiving and processing areas <u>and</u> ancillary areas of the facility such as the trailer loadout areas.</p>	<p>A-06-20</p> <p>Please see response to comment A-06-10.</p>

<p>[Commenter: A-06]</p>	
<p>A-06-16</p> <p>18) Subsection (4)(a)(vii) – The TPCHD suggests clarifying that leachate from the tipping floor/receiving areas <u>and</u> ancillary areas (e.g., trailer loading areas where washdown water is generated and where waste spillage occurs) of the facility must be properly contained and managed.</p> <p>[Commenter: A-06]</p>	<p>A-06-16</p> <p>Please see response to comment</p> <p>A-06-10.</p>
<p>A-06-17</p> <p>Subsection (4)(b)(ii) – The TPCHD recommends replacing the words “drop boxes” with “detachable containers” to be consistent with the definition of “Drop box facility”.</p> <p>[Commenter: A-06]</p>	<p>A-06-17</p> <p>Ecology replaced the words "drop boxes" with "detachable containers" in WAC 173-350-310(4)(b)(ii) to be consistent with the definition of "drop box facility."</p>
<p>A-06-18</p> <p>Subsection (4)(b) – The TPCHD recommends adding (iii) to include the requirement that the detachable containers are placed on an impervious surface to prevent contamination of soil and groundwater and to improve the cleaning of spilled solid waste at a drop box facility.</p> <p>[Commenter: A-06]</p>	<p>A-06-18</p> <p>In WAC 173-350-310(4)(b)(ii) Ecology changed the language to allow detachable containers either to be watertight or if not, to be stored on an impervious surface.</p>

<p>A-06-19</p> <p>Subsection (6)(a)(iv) – The rule should require that all waste be removed from the tipping floor/receiving areas and the solid waste facility’s ancillary areas (e.g., the transfer trailer load out area) at the end of each operating day unless in a fully enclosed building (i.e., “indoor storage” as defined in the rule). This requirement would give the jurisdictional health departments the tool they need to assure that wastes are removed or isolated from vectors and wind during the facility’s non-operating hours.</p> <p>[Commenter: A-06]</p>	<p>A-06-19</p> <p>During preliminary draft comment periods, jurisdictional health departments predominantly wanted the flexibility to determine how frequently waste had to be removed from the tipping floor. This is provided for under WAC 173-350-310(6)(b)(iv).</p>
<p>O-14-12</p> <p>In the new WAC 173-350-310 Transfer stations and drop box facilities, a pre-existing exemption from permitting for drop boxes used solely for collecting recyclable materials is transferred from WAC 173-350-020. DOE should take this opportunity to also recognize the "two box rule" from WAC 173-350-345, which states:</p> <p>All sites where recyclable materials are generated and transported for recycling must provide a separate container for nonrecyclable materials (solid waste), using collection practices consistent with chapter 173-350 WAC.</p> <p>This important rule has not been consistently enforced or applied, but is absolutely necessary to ensure real recycling and prevent contamination of recyclable materials containers. This rule recognizes the reality that rarely does a box contain 100% recyclable materials, and should be recognized in 173-350. If only a single container is present, all of the waste from a site will go in that container. DOE should take this opportunity to add the "two box</p>	<p>O-14-12</p> <p>The transfer station and drop box facilities standards are for facilities, not dumpsters at the point of solid waste generation. To address this comment, Ecology added reference to WAC 173-345-040 to section WAC 173-350-300(2), On-site storage.</p>

<p>rule" to 173-350 to have all applicable regulations in a single place for operators to consider and reinforce the statutory requirement of source separation for recyclable materials.</p> <p>[Commenter: O-14]</p>	
<p>O-16-03</p> <p>First, WAC 173-350-310(1)(d)(ii) specifies that to maintain an exemption, facilities may only accept materials separated into distinct individual material streams. This language should be further clarified to specify that simply having a container comprised of mixed materials, each perhaps individually recyclable, is not enough to sustain an exemption under the rule. The materials must be separated and stored separately prior to arrival. WRRRA suggests the following edits:</p> <p>WAC 173-350-310(1)(d)(ii) Accept only recyclable materials that have been separated prior to arrival at the facility into <u>distinct individual material streams stored apart from other materials comprised of a single commodity</u>, such as cardboard. Dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by volume per year, and five percent by volume per load. Commingled recyclable materials, as defined in this chapter, may not be accepted under this exemption;</p> <p>This change should provide the needed specificity to operators and leave no question as to the new requirements for the exemption.</p> <p>[Commenter: O-16]</p>	<p>O-16-03</p> <p>Please see response to comment O-14-1.</p>
<p>O-16-04</p> <p>Second, the draft alters the "10% rule" for exempt facilities, by changing the unit of</p>	<p>O-16-04</p> <p>Please see response to comment O-05-07.</p>

measurement from weight to volume. The rationale behind this change is unclear. In some circumstances, volume may provide a useful measurement. However, weight is an inherently more precise measurement that is easily recorded and documented for recordkeeping purposes, such as Transporter Law records. As virtually everything in the solid waste industry is weighed at some point, weight should be kept in the rule as the more accurate measurement. The rule should not eliminate weight in favor of volume, but provide for the consistent use of both units of measurement.

[Commenter: O-16]

<p>9. Beneficial Use Permit Exemptions</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-14-06</p> <p><u>WAC 173-350-200 Beneficial use permit exemptions.</u></p> <p><u>(iii) Use of a solid waste as a component of fill unless a demonstration shows that the material meets specific engineering needs and specifications other than occupying space. Any proposal made under this section to use solid waste as a component of fill must be certified by a professional engineer registered in the state of Washington, in an engineering discipline appropriate for the proposed activity.</u></p> <p>Comment:</p> <p>Propose deleting: other than occupying space. as a clarifier statement.</p> <p>The proposed language specifies that a material reuse must provide contribution other than to “occupy space”. This restrictive language should be deleted. Occupying space may provide environmental value in that a material may take the place of virgin materials thereby reducing environmental impact.</p> <p>As an example, one could apply for a beneficial use request to utilize prepared / processed roofing to be used as a component of road base fill to be covered by asphalt. This addition may provide little if any engineering benefit and is therefore likely just “occupying space”.</p>	<p>B-14-06</p> <p>No additional change was made to language in WAC 173-350-200(1)(b)(iii). The condition that use of a solid waste as fill meets engineering needs and specifications is to establish a distinction between a demonstrated beneficial use and landfilling. A BUD (beneficial use determination) is not intended as an alternative to permitting or exempting facilities that handle solid waste, including landfills. The rule defines a landfill as "a disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill." Simply occupying space would meet this definition of landfill.</p>

However this use would have benefit in that it would take the place of natural products, sand and gravel, and reduce the burden on landfills and associated transport impacts.

[Commenter: B-14]

<p>10. Incineration</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-03-01</p> <p>I have a comment on section -020 (2)(bb),"Management of routine non-livestock animal mortalities by burial, incineration in a unit with a design capacity of less than twelve tons per day, natural decomposition, or rendering, when managed in compliance with WAC 246-203-121, General sanitation."</p> <p>The phrase, "incineration in a unit with a design capacity of less than twelve tons per day" needs to be clarified to ensure the unit meets some engineered standard and that it meets air quality standards.</p> <p>[Commenter: A-03]</p>	<p>A-03-01</p> <p>Incineration of non-livestock animal mortalities is discussed in WAC 246-203-121(1)(d). WAC 173-350-020(2)(cc) asserts that WAC 173-350 does not apply in this situation as it is already covered in another section (WAC 246-203-121). A requirement to meet Washington State air quality and design standards is included under the definition of incineration in WAC 246-203-121(1)(d). "Incineration means controlled and monitored combustion for the purposes of volume reduction and pathogen destruction in an enclosed device approved by the department of ecology or the local air pollution control authority under Chapter 70.94 RCW, Washington Clean Air Act, and Chapter 70.95 RCW, Solid waste management—Reduction and recycling," WAC 246-203-121(1)(d).</p>

<p>11. Limited Purpose Landfills</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>I-02-03</p> <p>A definition for “functionally stable” should be provided in the Definitions section. The phrase is first used in the definition of “post-closure care,” but the definition is buried many pages later in 173-350-400(11)(a) – Limited Purpose Landfills – Post-Closure Care Requirements. It would be advisable to reference this determination to a relatively standard statistical measure for those parameters that are monitored, or to an Ecology reference publication, rather than leave it up to the whim of the jurisdictional health department, which may not have much experience in statistical analysis of environmental parameters such as groundwater contaminant concentrations.</p> <p>[Commenter: I-02]</p>	<p>I-02-03</p> <p>As the commenter notes, a description of what is meant by the term "functionally stable" is contained within the post-closure care requirements for limited purpose landfills at WAC 173-350-400(11)(a). The text of the proposed rule at that location parallels the structure and language regarding the topic of post-closure care and functional stability in the Criteria for Municipal Solid Waste Landfills at WAC 173-351-500(2)(a) which was adopted into that rule in 2012.</p> <p>Ecology has considered the value of relocating that explanatory language into the definitions section, and has concluded that the language should be left in the post-closure requirements of Section 400. Because the concept of functional stability pertains only to landfills, and more specifically to those landfills with the potential to experience changes arising from decomposition of the wastes they contain, the term has no real uses pertinent to any other section of the proposed rule besides limited purpose landfills. Therefore there is minimal value in establishing a definition global to the proposed rule in Section 100. Ecology believes that what value there may be in doing so is outweighed by maintaining consistent parallel structure and language between WAC 173-350-400 and Chapter 173-351 WAC, Criteria for municipal solid waste landfills, regarding the topic of post-closure care and functional stability.</p>
<p>I-02-02</p> <p>Again, because the nature of a landfill is permanent, as long as waste is present, a</p>	<p>I-02-02</p> <p>Ecology revised the definition of “limited purpose landfill” as suggested.</p>

<p>modification of the definition of “limited purpose landfill” is suggested, as follows:</p> <p>“Limited purpose landfill means a landfill that is not an inert waste landfill and receives <u>or has received</u> only solid wastes designated as nonhazardous and are not municipal solid wastes. Limited purpose landfills include, but are not limited to, landfills that receive <u>or have received</u> segregated industrial solid waste, construction, demolition and” <i>etc.</i></p> <p>[Commenter: I-02]</p>	
<p>I-02-06</p> <p>-400(1)(a) The first sentence in this paragraph is not needed since it does not tell the reader anything. (“These standards apply to limited purpose landfills.”)</p> <p>[Commenter: I-02]</p>	<p>I-02-06</p> <p>Ecology recognizes that the sentence is somewhat tautological, since limited purpose landfills are more easily characterized by what they are not. The sentence was included to provide consistency with the structure of other sections of the rule.</p>
<p>I-02-08</p> <p>8. -400(4)(i) <u>Setback requirements.</u> Some additional language is recommended for inclusion in this paragraph to address both closure and redevelopment scenarios. While there is waste in a limited purpose landfill, i.e., for the entire life of the landfill, the 100-foot setback is useful for protecting the integrity of the landfill liner and cover, providing access to the landfill for cover repairs and landfill gas management and monitoring systems, and for providing a buffer zone to ensure early warning if landfill gas is migrating offsite. The current regulation language does not clearly address closure, post-closure, and redevelopment</p>	<p>I-02-08</p> <p>The setback requirements here are part of the design criteria, and are intended to establish a minimum distance between the property boundary and the limits of waste placement. As the commenter notes, there are operational benefits that may accompany the setback requirement, such as providing access to the perimeter of the lined area, or as a landfill undergoes phased closure, to areas under interim or final cover. However, those benefits do not always require that the setback zone be kept free of other activities. It may be reasonable to install structures within the setback zone that support other activities on the property. Such activities and structures may not be limited to solid waste handling, such as the placement of a Park and Ride on a closed landfill.</p>

<p>scenarios. Suggested revision to this paragraph:</p> <p>“<u>Limited purpose landfills, closure plans, and redevelopment plans</u> must be designed to provide a setback of at least one hundred feet between the active area and the property boundary, <u>or between the active area and the boundary of a non-landfill land use</u>”....</p> <p>[Commenter: I-02]</p>	<p>Maintaining the integrity of a landfill's waste containment system is a primary concern for a landfill's post-closure care phase, and for a phase following post-closure that is sometimes referred to as custodial care. However, the details of how that integrity should be maintained at any particular facility are not definitively linked to the established setback zone, and should be specifically addressed in the post-closure plan and the environmental covenant.</p>
<p>I-02-09</p> <p>-400(6)(a)(iv)(B). <u>Permit requirements</u> – Operating. Recommending the following expansion of paragraph (B):</p> <p>“Control litter, dust, and nuisance odors, <u>and other emissions, including landfill gases;</u>”</p> <p>[Commenter: I-02]</p>	<p>I-02-09</p> <p>The operating requirements related to landfill or explosive gases are addressed in some detail in WAC 173-350-400(6)(a)(vii). Additional requirements related to air emissions may also be established by the local air permitting authority. However, those requirements would fall outside of the scope of solid waste permitting under this rule.</p>
<p>I-02-10</p> <p>-400(8)(e) <u>Environmental covenant</u>. This section should ensure that the as-built drawings for the landfill AND for closure of the landfill are maintained by the Department of Ecology. The following language is suggested for subparagraph - 400(8)(e)(v):</p> <p>“Identify the name and location of the administrative record for the property subject to the environmental covenant, <u>including the construction record drawings of the landfill, the landfill closure plan, construction record drawings for the landfill</u></p>	<p>I-02-10</p> <p>State record retention requirements dictate the length of time records are kept. The adopted rule does not contain language regarding record retention in WAC 174-350-400(8).</p>

<p><u>closure, and associated construction quality assurance reports. These records must be retained in perpetuity and be accessible to the public via public records request.”</u></p> <p>[Commenter: I-02]</p>	
<p>I-02-11</p> <p>400(11) Limited purpose landfills – Post-closure care requirements. When the jurisdictional health department determines the landfill has reached “functional stability” at the end of the post-closure care period, is the owner/operator of the landfill done with their site care responsibilities? Who will observe or monitor the landfill liner and cover integrity for the long term? At some point in time, the liner and cover materials will fail—perhaps 40 years down the road, but there needs to be some sort of long-term inspection responsibilities on the part of the jurisdictional health department to ensure that direct exposure to waste, leachate, or other contaminants will not occur. Perhaps some language should be added to this section indicating who takes responsibility after the post-closure care period is complete. This is especially important in redevelopment scenarios.</p> <p>[Commenter: I-02]</p>	<p>I-02-11</p> <p>The environmental covenant is intended to address the issues raised by the commenter. The specific terms of an environmental covenant for a particular facility will establish the responsibilities of the owner/operator once the JHD determines that the facility had achieved functionally stability. It should also ensure that any person who might wish to redevelop the site of a landfill closed under this regulation has adequate information to inform their decision-making and planning regarding the site.</p>
<p>I-02-07</p> <p>-400(4)(e) Final closure system design. Paragraph (I) addresses management of landfill gases. In reality, however, the standard of performance for landfill <u>covers</u> is the same as that stated in paragraph (4)(b)(i)(B) for landfill <u>liners</u> regarding control of methane and other explosive</p>	<p>I-02-07</p> <p>In response to this comment, Ecology changed the organization of WAC 173-350-400(4), the design requirements subsection. Ecology removed the criteria for explosive gases from their location in the liner performance standard, and placed them in a new paragraph in the general design requirements for limited purpose landfills. That paragraph is then referenced at appropriate points in the design</p>

<p>gases, originating from OSHA standards. I would strongly recommend the repetition of the language of (4)(b)(i)(B), which includes the subparagraphs (I), (II), and (III), in lieu of (4)(e)(i)(J). This would be stated as follows:</p> <p>(J) Meets the requirements of regulations, permits and policies administered by the jurisdictional air pollution control authority of the department under chapter 70.94 RCW, Washington Clean Air Act and Section 110 of the Federal Clean Air Act.</p> <p><u>“Controls methane and other explosive gases to ensure they do not exceed:</u></p> <p><u>(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);</u></p> <p><u>(II) The lower explosive limit for gases in soil or in ambient air at the property boundary or beyond; and</u></p> <p><u>(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures.”</u></p> <p>[Commenter: I-02]</p>	<p>criteria for liners and final closure systems, the operating requirements, and the post-closure care requirements.</p>
<p>A-21-08</p> <p>Under WAC 173-350-400 (6) (a) (vi) add to that requirement <u>“A description of how operators will maintain operating records of the amounts (weight or volume), source and types of waste received”</u>.</p>	<p>A-21-08</p> <p>Most of the language suggested by the commenter already occurs in the proposed rule at WAC 173-350-400(6)(ix):</p> <p>"(ix) A description of how operators will maintain operating records on the amounts (weight or volume) and types of waste received and removed from the facility, and the number of vehicles</p>

<p>[Commenter: A-21]</p>	<p>delivering waste to the facility, including the form or computer printout used to record this information."</p> <p>The exception is the commenter's suggestion that the source of wastes received also be required as part of the operating record. In the absence of additional rationale, Ecology does not believe that there is sufficient value in universally requiring limited purpose landfill operators to keep a record of the source of wastes received to justify adding this requirement to the proposed rule. However, the permitting jurisdictional health department could include such a requirement in a facility's permit if it elected to do so.</p>
<p>A-21-07</p> <p>Section 400 – Limited Purpose Landfills – Permit Requirements – Operating</p> <p>Under WAC 173-350-400 (6) (a) (ii), add to that requirement “Provide acceptance criteria to generators and review wastes for approval prior to acceptance” .</p> <p>[Commenter: A-21]</p>	<p>A-21-07</p> <p>The objective of the comment appears to be the creation of a requirement for an operator of a limited purpose landfill to provide both waste acceptance criteria and a review process for the approval of wastes for disposal as an element of the plan of operations for the landfill. That is one possible approach to establishing these functions. However, it is also common practice in some jurisdictions to establish those functions as an explicit element of the solid waste permit. Ecology does not see a need to prescribe in the rule how the responsibility for establishing these functions will be decided between the facility and the permitting jurisdictional health department.</p>
<p>O-15-37</p> <p>WAC 173-350-400 Limited Purpose Landfills Comment Summary:</p> <p>These facilities have provided an avenue for sham recyclers to achieve cheap disposal and require additional oversight. In particular, facilities located in the Naches River Valley have a long history of enforcement actions.</p>	<p>O-15-37</p> <p>Please refer to response to comment O-05-15.</p>

<p>The goals of other rule sections will be compromised if action is not taken here.</p> <p>All limited purpose landfills should be equipped with scales and required to keep accurate and audited logs on the materials they are accepting.</p> <p>[Commenter: O-15]</p>	
<p>O-15-36</p> <p>WAC 173-350-400 Limited Purpose landfills.</p> <p>In updating the permitting requirements and operating standards for limited purpose landfills, the Department should address longstanding issues with these facilities which impact the goals of other sections. Some limited purpose landfills, particularly several facilities located in the Naches River Valley, have proven to be a crucial component of the sham recycling business model.</p> <p>The new exempt facility rules in WAC 173-350-210 make some progress on addressing sham recycling. The sham recycling business model typically requires two components a general lack of oversight so that the sham recycler can operate under the radar and deceive local officials and the customers they serve and a haven for the cheap disposal of the materials they claim to recycle. The new facility rules work to at least partially address the first component of this model. However, the rules regarding limited purpose landfills should be updated to address the second component of their business model cheap disposal.</p> <p>To help provide for accountability and enforcement, limited purpose landfills should be required to have a scale to meet the design requirements in WAC 173-350-400(4). Volume is too subjective for an effective unit of measurement and provides ambiguity for sham recyclers, weight is more precise. The new draft</p>	<p>O-15-36</p> <p>Please see the response to comment O-05-15.</p>

<p>requires "a description of how operators will maintain operating records" on the amount of waste received in WAC 173-350-400(4)(ix). This section should be reworded to specify that accurate and truthful record keeping is a permitting requirement and provide for enforcement, reporting, and auditing of these numbers to address consistent problems with this class of facilities.</p> <p>[Commenter: O-15]</p>	
<p>O-05-15</p> <p>To help provide for accountability and enforcement, inert waste and limited purpose landfills should be required to have a scale to meet design requirements. Volume is too subjective for an effective unit of measurement and provides ambiguity for sham recyclers— weight is more precise. The new draft requires “a description of how operators will maintain operating records” on the amount of waste received in WAC 173-350-400(4)(ix). This section should be reworded to specify that accurate and truthful record keeping is a permitting requirement and provide for enforcement, reporting, and auditing of these numbers to address consistent problems with this class of facilities.</p> <p>[Commenter: O-05]</p>	<p>O-05-15</p> <p>This comment suggests two changes to the proposed rule language regarding landfills operating under either WAC 173-350-400 or WAC 173-350-410: to require scales as a design requirement; and to add language to specify that accurate and truthful reporting is a permit requirement.</p> <p>Ecology has previously addressed the issue of appropriate means of determining the quantity of wastes placed in inert landfills, in response to comments for the initial adoption of Chapter 173-350 WAC in 2003. The rule language proposed at that time would have required that operators of limited purpose landfills "[w]eigh all incoming waste on scales or provide an equivalent method of measuring waste tonnage capable of estimating total annual solid waste tonnage to within plus or minus five percent for landfills having a permitted capacity of greater than ten thousand cubic yards per year." Operators of inert waste landfills would have been required to "[m]aintain daily operating records of the weights quantity of inert waste disposed. Methods for measuring waste shall be capable of estimating total annual weight to within plus or minus twenty percent."</p> <p>Ecology received a comment on the proposed requirement for operators of inert waste landfills that read in part:</p>

"Limiting owner/operators to recording weight will only add cost to the operation of inert waste landfills, with no demonstrated value. Those landfills not already equipped with weight scales will either have to install scales, or come up with a system for estimating weight that is accurate to plus or minus 20% (this is difficult to do when you are dealing with waste of varying densities). Either way, the cost of operating the landfill goes up. Unless the landfill has a tipping fee that is based on a cost per unit of mass, knowing the actual weight of the inert waste provides little value. Volume is a much more valuable indicator in terms of determining landfill capacity."

In the "CONCISE EXPLANATORY STATEMENT AND RESPONSIVENESS SUMMARY FOR THE ADOPTION OF Chapter 173-350 WAC, Solid Waste Handling Standards; January 8, 2003", Publication Number 03-07-001, Ecology responded:

"Ecology agrees that the goal of determining the quantity of inert wastes placed in landfills can be achieved in a less burdensome manner. The operating record requirement has been amended to allow an owner or operator to use any appropriate method to record the quantity of waste disposed."

Although the comment was made in the context of the proposed operating standards for inert waste landfills, Ecology also amended the proposed operating standards for limited purpose landfills, as well as record-keeping and reporting requirements, to allow either weight or volume to be collected and reported.

Ecology's position on the means of achieving the goal of determining the quantity of wastes placed limited purpose or inert waste landfills remains unchanged. The addition of scales to the design requirement for these types of landfills would unjustifiably impose a new burden on existing operators, or an additional barrier to entry for potential new operators.

	<p>With regard to the suggestion that the proposed rule language be changed to specify that accurate and truthful reporting is a permit requirement, Ecology believes that accurate and truthful record-keeping and reporting is implicit in the requirements for permitted solid waste facilities under Chapter 173-350 WAC. Ecology also does not see that specifying such language would address the underlying concerns expressed by the commenter. The primary authorizing statute for Chapter 173-350 WAC is Chapter 70.95 RCW, which confers very limited enforcement powers to Ecology. Consequently, enforcement authority over a permitted facility's compliance with solid waste regulations and its solid waste permit principally resides with the jurisdictional health department, and generally relies on statutes other than Chapter 70.95 RCW. Any decisions on enforcement actions arising from solid waste permit requirements are primarily at the discretion of the jurisdictional health department issuing the permit.</p> <p>Ecology does note that with regard to the matter of accurate and truthful record-keeping and reporting, RCW 9A.76.175 provides that a person who knowingly makes a false or misleading statement to a public servant is guilty of a gross misdemeanor.</p>
<p>O-05-14</p> <p>WRRRA also opposes adding contaminated soils and dredged materials to the list of acceptable items at a limited purpose landfill. Even putting aside the problematic history of these facilities, it is difficult to understand why contaminated soils should be transported to potentially exempt, unlined landfills as opposed to a highly regulated state of the art “40 CFR Part 258” or “Subtitle D” landfill.</p> <p>[Commenter: O-05]</p>	<p>O-05-14</p> <p>The proposed rule does not seek to expand any list of acceptable items that can be disposed in limited purpose landfills. Ecology notes that contaminated soils and dredged materials have generally been acceptable for disposal in limited purpose landfills under Chapter 173-350 WAC since the rule was adopted in 2003.</p> <p>With regard to the comment's characterization of limited purpose landfills as "potentially exempt, unlined landfills", this appears to reflect a misreading of the proposed rule. In the proposed rule, WAC 173-350-400(2) states explicitly "[t] here</p>

are no permit exemptions for limited purpose landfills."

Since the rule was adopted in 2003, the liner design requirements for limited purpose landfills have been based on meeting a set of liner performance criteria, and there have been three options for how to achieve that objective. Those performance standards and the options to achieving them are fundamentally unchanged in the proposed rule. Two of the options involve some form of engineered liner. The third option allows for a limited purpose landfill to operate without an engineered liner.

In the proposed rule, in order to operate without an engineered liner, the owner or operator must first demonstrate "to the satisfaction of the jurisdictional health department during the permitting process that:

(I) The contaminant levels in the waste and leachate are unlikely to pose an adverse impact to the environment; and

(II) The ability of natural soils to provide a barrier or reduce the concentration of contaminants provides sufficient protection to meet the performance standards of WAC 173-350-040; and

(III) Explosive gases generated by the facility will not exceed the criteria established in (b)(i) of this subsection."

Ecology has considered the possibility that the comment may have conflated limited purpose landfills with inert waste landfills. However, Ecology believes it would be incorrect to equate a limited purpose landfill, which still must meet liner performance standards if operating without an engineered liner, with those for an inert waste landfill, which has no such requirements.

As to the comment's reference to disposal of contaminated soils or dredged material in a "potentially exempt" landfill, it is true that inert

	<p>waste landfills may be exempted from permitting in the rule if their capacity is two hundred fifty cubic yards or less. However, Chapter 70.95 RCW already bars the disposal of soils or dredged material determined to be solid waste in inert waste landfills. That statutory bar is not affected by the proposed rule.</p>
<p>B-16-08</p> <p>WAC 173-350-400-410 Limited Purpose and Inert Waste Landfills.</p> <p>a. WCI opposes expanding exemptions for these facilities</p> <p>b. WCI opposes adding contaminated soils and dredged materials to the list of acceptable items at a limited purpose landfill. Inert waste and limited purpose landfills should be required to have a scale to meet design requirements. The new draft requires "a description of how operators will maintain operating records" on the amount of waste received in WAC 173-350-400(4)(ix). This section should be reworded to specify that accurate and truthful record keeping is a permitting requirement and provide for enforcement, reporting, and auditing of these numbers to address consistent problems with this class of facilities.</p> <p>[Commenter: B-16]</p>	<p>B-16-08</p> <p>On the topic of disposing of contaminated soils and sediments in limited purpose landfills, please see the response to comment O-05-14.</p> <p>On the topics of scales as a design requirement, and accurate and truthful record-keeping, please see the response to comment O-05-15.</p>

<p>12. Inert Waste Landfills</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-18-04</p> <p>Table 410-A (Inert Landfill Exemptions)</p> <p>(2) Allows for amounts up to 2,000 yds to be exempted so long as some specific requirements are met. I'm wondering if there should be some requirement regarding some city or county engineering dept person approving or OK that site is suitable and that proper compaction techniques be employed. I'm not really an expert but I'm wondering if there were big voids in the fill that it may produce a safety hazard at some point??? I've seen land owners (primarily farmers) use fill to make a road bed across a revine. It is on their property so maybe it doesn't matter??? Should we be concerned that the fill may settle and the road become hazardous or perhaps that culverts are not installed which may cause flooding /wash-out issues???</p> <p>[Commenter: A-18]</p>	<p>A-18-04</p> <p>Please see response to comment O-14-14.</p>
<p>A-21-09</p> <p>Section 410 - Inert Waste Landfill Permit Requirements - Operating</p> <p>Under WAC 173-350-410 (6) (a) (ii), add <u>“Provide acceptance criteria to generators and review wastes for approval prior to acceptance”</u>.</p> <p>Under WAC 173-350-410 (6) (a) (vi) add “source” to “A description of how operators will maintain operating records of the</p>	<p>A-21-09</p> <p>Chapter 70.95 RCW states that “‘inert waste landfill’ means a landfill that receives only inert waste, as determined under RCW 70.95.065...”</p> <p>RCW 70.95.065 provides a list of waste types that are allowed to be disposed in an inert waste landfill. The proposed rule specifies that list in WAC 173-350-410(1)(a) through (f). The acceptance of other types of solid waste will cause an inert waste landfill to be out of compliance with its permit, just as accepting MSW would cause a permitted limited purpose landfill to be out of compliance. However, soils impacted by release of a contaminant may in some circumstances not be identified as a solid</p>

<p>amounts (weight or volume), <u>source</u> and types of waste received ...”.</p> <p>[Commenter: A-21]</p>	<p>waste, and so could be used for fill soils in inert waste landfill operations. For additional discussion, please see the response to comment A-21-04.</p> <p>See the response to comment A-21-08 regarding the suggestion that the source of wastes received also be required as part of the operating record.</p>
<p>A-06-26</p> <p>Table 410-A – The TPCHD does not agree with the exemption category in Item (2) and proposes its removal from the rule. The TPCHD proposes to remove this category from the rule as this permit exemption does not support the beneficial recycling of this material if operators are allowed to create these midsize inert waste landfills.</p> <p>[Commenter: A-06]</p>	<p>A-06-26</p> <p>See Response to Comment O-14-14.</p>
<p>A-06-27</p> <p>Subsection (8)(b) – The TPCHD recommends that the closure of inert waste landfills should include capping and vegetating the fill with a minimum of two-feet of clean soil. This requirement of a soil cover would eliminate physical hazards and minimize erosion (e.g., wind, precipitation) at the closed inert waste landfill.</p> <p>[Commenter: A-06]</p>	<p>A-06-27</p> <p>Design criteria for municipal solid waste landfills regulated under Chapter 173-351 WAC and limited purpose landfills regulated under WAC 173-350-400 require that such landfills have a bottom liner and leachate collection systems. In order to minimize the quantity of leachate generated from percolation of rain and snowmelt through the waste in these lined landfills, the closure criteria for them includes an anti-infiltration layer. The criteria for cover systems on these types of landfills also include a layer of a specified thickness of soil capable of supporting vegetation to overlie the anti-infiltration layer. The rationale for the soil/vegetation layer in these covers is to protect the anti-infiltration layer from exposure to weather and sunlight, and to facilitate lateral drainage of rain and snowmelt off the upper surface of the anti-infiltration layer.</p> <p>In contrast, the design criteria for inert waste landfills closures do not include a bottom liner or</p>

	<p>leachate collection system. Accordingly, the closure criteria for inert waste landfills do not require an anti-infiltration layer, or an associated overlying soil/vegetative layer to provide protection from the elements and lateral drainage. The closure criteria for an inert waste landfill in the rule include leveling the wastes to the extent practicable, or as appropriate for the proposed future use, filling all voids which could pose a physical threat for persons, or which provide disease vector harborages, in a manner that will control fugitive dust and protect the waters of the state. From a functional standpoint, these criteria could be accomplished using a vegetated soil layer, or they could be accomplished by grading the site with aggregate of an appropriate gradation.</p>
<p>O-14-14</p> <p>WAC 173-350-410 Inert Waste Landfills.</p> <p>WRAA opposes deregulation and exemption of solid waste facilities. Accordingly, we oppose increasing the threshold for exemption, from 250 cubic yards to 2000 cubic yards, an almost tenfold increase in the size of the exemption. This change is in keeping with the overall theme of "deregulation" found in the preliminary rule draft, though it is not clear what DOE wishes to accomplish by exempting more and larger facilities.</p> <p>Again we must question what facilities will be deregulated under this exemption, and how will the exemption requirements be enforced? How many existing permitted facilities would be exempt under this rule? What facilities? How many new facilities are anticipated to take advantage of this tenfold increase in the exemption? Under the rule, the operator must provide notification of intent to the local JHD and DOE for a facility under 2000 cubic yards. With a lack of any permitting fees with the exemption, what is the enforcement mechanism to ensure that an exempt facility remains under 2000 cubic yards? What oversight does the rule</p>	<p>O-14-14</p> <p>When the Solid Waste Handling Standards were adopted in 2003, the inert waste landfill threshold capacity limit for permit exemption was established at two hundred fifty cubic yards, a significant lowering of the capacity threshold of two thousand cubic yards that existed in Chapter 173-304 WAC. The capacity of two hundred fifty cubic yards was chosen as the threshold based upon comments received during early development of the rule and from earlier drafts of the rule.</p> <p>With the lowering of the capacity threshold, Ecology expected that there would be an increase in the number of permits issued to inert waste landfills which had been exempted under Chapter 173-304 WAC but would no longer be exempted under Chapter 173-350 WAC. By and large, an increase in permits for facilities in that range did not materialize.</p> <p>During this rule update, Ecology proposed the additional tier of conditional exemption in the belief that it was likely there was a category of inert waste landfills with capacities between of two hundred fifty cubic yards and two thousand cubic yards which were operating without having obtained a permit. However, recognizing that there had been</p>

<p>provide? What is the process if a facility exceeds 2000 cubic yards? Facilities under 250 yards do not require notification to the JHD. How can the rule provide for any oversight or enforcement if neither the JHD nor DOE is ever even notified of their existence?</p> <p>This section is also problematic because, based on staff comments at workshops, the increase to 2000 cubic yards in this section has also driven expansions to 2000 cubic yards in the piles and hybrid waste landfills sections. Inert waste landfills, and related sections, should, at a minimum keep the current 250 cubic yard standard for exemption. Optimally, all solid waste facilities should be subject to oversight, inspection, reporting, and diligent enforcement - not deregulation.</p> <p>[Commenter: O-14]</p>	<p>few reports of public health or environmental issues associated with inert waste landfills in that capacity range, Ecology proposed in its original scoping of the rule revision to add a conditional exemption for them to facilitate bringing them into administrative compliance.</p> <p>During the development of the earlier drafts of the proposed rule, Ecology reviewed the capacities of permitted inert waste landfills to determine how many might be moved from fully-permitted status into conditionally-exempt status as a result of the proposed added exemption. The review identified one facility that might be affected. Ecology did not attempt to estimate how many new inert waste landfills might have been created to take advantage of the proposed added exemption.</p> <p>Ecology received no comments on the proposed rule that supported this added exemption. Comments from members of both the regulatory community and waste industry suggested that the additional conditional exemption could allow facilities to be operated with what the commenters deemed to be potentially significant impacts without adequate oversight.</p> <p>In view of the nature of the comments and the apparent narrow applicability of the proposed exemption, Ecology elected to retain the rule's exemption framework without significant addition or modification, and struck the proposed exemption terms and conditions from Table 410-A.</p>
<p>O-05-13</p> <p>WRRRA opposes expanding exemptions for these facilities and questions how the department could possibly support this position given the problematic history of these facilities. Some limited purpose and inert waste landfills, particularly several facilities located in the Naches River Valley, have proven to be a crucial component of the sham recycling business</p>	<p>O-05-13</p> <p>Please see response to comment O-14-14 and comment O-13-05.</p>

<p>model: cheap disposal without oversight. WRRRA is disappointed that the Department did not use this rule as an opportunity to address these issues, but instead open the door for more sham recycling, abuse, and potential environmental damage.</p> <p>Under the new rule, entities can create unlined landfills with up to 250 yards of material- up to 25 dump trucks– without notifying local health or seeking any approval from the Department. The new rule also allows for the creation of unlined landfills up to 2,000 yards – up to 200 dump trucks– with only minimal notice and reporting requirements. These changes are reckless and irresponsible both from the standpoint of enabling sham recycling, creating clean-up sites, and environmental hazards.</p> <p>[Commenter: O-05]</p>	
<p>B-16-07</p> <p>WAC 173-350-400-410 Limited Purpose and Inert Waste Landfills.</p> <p>a. WCI opposes expanding exemptions for these facilities</p> <p>[Commenter: B-16]</p>	<p>B-16-07</p> <p>Please see response to comment O-14-14.</p>

<p>13. Groundwater Monitoring</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>I-02-12</p> <p>WAC 173-350-500(1) Groundwater monitoring – General provisions. In paragraph (c), the restriction of persons qualified to prepare reports, plans, procedures, and design specifications for groundwater monitoring to include only licensed geologists is too limiting and not commensurate with the qualifications of personnel who prepare the same types of documents for groundwater monitoring at MTCA cleanup sites, which is generally more complex than at limited purpose landfills. Suggested revision to this paragraph:</p> <p>“(c) All reports, plans, procedures, and design specifications required by this section must be prepared by a licensed professional <u>hydrogeologist</u> in accordance with the requirements of chapter 18.220 RCW, Geologists, <u>or by a licensed professional environmental engineer in accordance with the requirements of chapter 18.43 RCW, Engineers and Land Surveyors.</u>”</p> <p>[Commenter: I-02]</p>	<p>I-02-12</p> <p>This comment references language from an earlier draft of the rule. In the adopted rule, WAC 173-350-500(1)(c) reads as follows:</p> <p>(c) All reports, plans, procedures, and design specifications required by this section must be prepared by a licensed professional in accordance with the requirements of Chapter 18.220 RCW, Geologists.</p> <p>Chapter 18.220 RCW, Geologists, may allow certain engineers to prepare the documents listed, depending on their individual qualifications.</p>

<p>14. Permitting</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-12-22</p> <p>WAC 173-350-710(3)(d) Re-write to clarify what would happen if: 1) Ecology fails to complete its review within the timeframe specified (rendering the reissued permit invalid); or, 2) Ecology does not concur with the jurisdictional health department’s issuance of a permit renewal. In either of those situations, would the permit holder be operating without a valid permit?</p> <p>[Commenter: A-12]</p>	<p>A-12-22</p> <p>The time frames for permit review and issuance are long-standing in both the rule and statute. Ecology did not propose any additional changes to language with this adoption. Most modifications to the permitting section were intended to bring elements into the rule that are expressed in statute but that have been omitted. Key to the ability of all parties to meet statutory obligations is that permits and permit renewals must be submitted to Ecology within seven days of issuance. This ensures that Ecology has an opportunity to conduct a review within thirty days as statute requires. If Ecology does not agree with the issuance of the permit, the department may appeal to the Pollution Control Hearings Board as prescribed in RCW 70.95.185(2). With regard to the question of permit validity if Ecology fails to meet the thirty-day response time, the statute provides no solution. Ecology is not aware of any challenges to the validity of a permit under the circumstances described in the comment. Absent statutory guidance and lack of precedents, resolution to such a challenge would require review by the Pollution Control Hearings Board in accordance with Chapter 43.21B RCW, or other judicial process if parties fail to reach a resolution.</p>
<p>A-07-08</p> <p>WAC 173-350-710(2)(a): In the instance that Ecology may need or desire more than the 45 days from receipt of a complete application, the jurisdictional health department would like the 90-day requirement to be extended for the same number of days.</p> <p>[Commenter: A-07]</p>	<p>A-07-08</p> <p>The section cited has no language pertaining to additional time to review a forwarded complete solid waste permit application. Statute requires that complete applications be approved or disapproved by the jurisdictional health department within ninety days. There is no authority to accommodate an extension. WAC 173-350-710(1)(d)(iii) requires that Ecology make its recommendation for or against issuance of the permit within forty-five days of receipt of a complete application from the</p>

	jurisdictional health department. This is not new language.
<p>A-16-12</p> <p>General changes in the facility sections, 210 - 360</p> <p>-320(4)(b)(i) last sentence-The jurisdictional health department may: remove "at the time of permitting". We want to look at the design requirements as facilities change with processes and practices.</p> <p>-320(6)(a)(v) last sentence- ...unless an alternate schedule is approved by the jurisdictional health department. Remove "as part of the permitting process;" as there may be times or events which would cause an alternate schedule that is not connected to permitting process, such as flooding, changing their process flow, etc.</p> <p>[Commenter: A-16]</p>	<p>A-16-12</p> <p>The examples provided by the commenter would fall under the permit modification process prescribed in WAC 173-350-710(4)(a). This can be done at any time. Ecology did not remove the suggested language.</p>
<p>B-10-10</p> <p>MULTIPLE SECTIONS OF WAC 173-350</p> <p><u>Existing, permitted facilities should not be required to submit facility drawings and construction documents to the local health district for review and approval.</u></p> <p>Throughout the draft regulations, Ecology appears to impose a new requirement that all existing, permitted facilities must submit "facility drawings" and "construction documents" to the health department for "review and approval." <i>See, e.g.,</i> WAC 173-350-210(5), 173-350-240(6), 173-350-310(5), 173-350-320(5), 173-350-330(5), 173-350-350(5), 173-350-400(5), 173-350-410(5). This</p>	<p>B-10-10</p> <p>Language was revised in the "permit requirements-documentation" subsections to clarify the scope of the documentation requirements. For example:</p> <p>"The owner or operator must submit facility drawings and construction documents for, at a minimum, <u>any proposed addition or modification of elements described in subsection (4) of this section to the jurisdictional health department for review and approval. The facility drawings and construction documents for proposed construction of engineered features must be prepared by a professional engineer registered in the state of Washington...</u>"</p>

<p>is an unreasonable, unnecessary, and unsupported requirement for facilities that have already been designed, constructed, and permitted. What purpose does this serve? How can the health department retroactively review and approve construction, design, and engineering plans for facilities that are already constructed? What standards do they use in determining whether to “approve” construction plans? Some facilities are decades old and may no longer have documents that accurately describe the design and engineering of the facility. The health department should not be able to retroactively require construction or design changes to a facility that has already been constructed. Moreover, health departments need only visit and inspect a solid waste facility to determine whether the facility complies with the design and performance requirements. Requiring every existing solid waste facility to submit facility drawings and construction documents is expensive, burdensome, and serves no reasonable purpose. WMW strongly recommends that these regulations be revised to apply only to new facilities.</p> <p>[Commenter: B-10]</p>	
<p>B-10-12</p> <p><u>If a facility does not operate in compliance with the terms and conditions to maintain their exemption status, the facility <i>should</i> be subject to the permitting requirements for solid waste handling.</u></p> <p>The current rule proposal asserts in WAC 173-350-210, 173-350-310, and 173-350-320 that if a facility does not operate in compliance with the conditions to maintain their permit exemption status, then that facility may be required to obtain a solid waste handling permit under this chapter. If a facility does not operate in compliance with this subsection, then a facility operator should be subject to the solid</p>	<p>B-10-12</p> <p>Not every situation requires permitting in order to bring a facility into compliance with terms and conditions of a conditional exemption authorized by RCW 70.95.305. If education about a situation needing correction fails to gain compliance, Ecology may escalate response in accordance with RCW 70.95.315, including requiring submittal of a solid waste permit application to the jurisdictional health department and may include penalties for failure to comply.</p> <p>Please see response to comment B-16-05.</p>

waste handling facility permitting requirements. If the operator is not appropriately managing the waste material, such as piles of commingled brick, concrete, or asphaltic materials that remain indefinitely at a facility, for example, then that site is operating as a solid waste handling facility, requiring a permit from the local health department. Therefore, WMW recommends that *may* be revised to *shall* in the referenced sections (that is, WAC 173-350-210, 173-350-310, and 173-350-320):

*If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility **shall** be subject to the permitting requirements for solid waste handling under this chapter (emphasis added).*

Furthermore, the current rule language of the aforementioned sections requires a solid waste handling permit, and Ecology has not outlined their rationale for diminishing this requirement, especially given that a main objective of this rulemaking was to discourage and curb sham recycling.

[Commenter: B-10]

<p>15. Applicability</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-06-01</p> <p>Section -020 Applicability</p> <p>The TPCHD recommends that under item (2) that the rule also exclude (i.e., this chapter does not apply to) solid waste permitting and exemption standards to “Emergency and Disaster Responses”. Some suggested language may include: “In the event a state of emergency is declared, or an imminent risk to public health exists, the jurisdictional health department may temporarily suspend or waive permit provisions or operational conditions, or may impose additional permit provisions or operational conditions, for such period deemed necessary in the sole discretion of the local health officer or his/her designee. To be considered an emergency or imminent risk to public health, the emergency must be declared by the President of the United States, the Governor of the State of Washington, the County Executive or a health order issued by the local health officer as provided by law.”</p> <p>[Commenter: A-06]</p>	<p>A-06-01</p> <p>Ecology concurs that health departments and others would benefit if the rule specifically addressed emergency situations and permitting. This was investigated at the start of the rule amendment process and it was determined at that time that there is no clear authority for providing exclusion from applicable permitting requirements. Ecology will continue to seek relief from at least some of the procedural requirements of the chapter under specific emergency circumstances. Whether relief from the chapter in its entirety is appropriate will require further involvement from stakeholders but Ecology recognizes that this is an important matter.</p>
<p>B-04-03</p> <p><u>WAC 173-350-020(2)(s) Handling of Reusable Materials</u></p> <p>In order to assure that the handling of secondary FRCM in support of the actual</p>	<p>B-04-03</p> <p>Ecology believes the rule language adequately describes reuse as intended.</p>

<p>reuse of these materials in permeable pavements (i.e., after R&D is completed) is also clearly exempt, and that the exemption aligns with the R&D exemption in proposed -020(2)(dd), proposed WAC 173-350-020(2)(s) should be changed as follows:</p> <p>"(s) Collection, transport, and <u>transfer sale</u> of used goods and materials (<u>including surplus, excess, or scrap materials</u>) solely for the purpose of reuse, as defined in WAC 173-350-100;"</p> <p>[Commenter: B-04]</p>	
<p>O-15-11</p> <p><i>Applicability and Determination of Waste Comments Summary</i></p> <p>Additional clarity is required in the applicability section to note that materials in that section managed improperly can become solid waste under the determination of waste test.</p> <p>[Commenter: O-15]</p>	<p>O-15-11</p> <p>Please see response to comment O-05-03.</p>
<p>O-05-03</p> <p>II. Definitions and Applicability.</p> <p>Applicability: The applicability section 173-350-020 lists a number of materials which are not regulated under 173-350. However, many of the materials or situations listed could certainly become solid waste or result in a solid waste handling activity depending on how the material is managed or where it is ultimately used or sent for disposal. This section should clarify that all materials could become a solid waste and be subject</p>	<p>O-05-03</p> <p>As the applicability section applies both to materials in specific settings, or when used in particular ways, Ecology cannot make a blanket statement that any materials in WAC 173-350-020 could become solid waste. Some could and some could not. However, Ecology will clarify in WAC 173-350-020 that the chapter applies to solid waste as defined and materials deemed solid waste through WAC 173-350-021.</p>

<p>to the determination of waste test in WAC 173-350-021, consistent with how they are managed.</p> <p>[Commenter: O-05]</p>	
<p>B-16-02</p> <p>Applicability.</p> <p>Applicability This section should clarify that all materials could become a solid waste and be subject to the determination of waste test in WAC 173-350-021, consistent with how they are managed.</p> <p>[Commenter: B-16]</p>	<p>B-16-02</p> <p>Please see response to comment O-05-03.</p>
<p>B-10-01</p> <p>WAC 173-350-020 APPLICABILITY</p> <p><u>The applicability section should be clear and explicit that if a facility and/or activity no longer meets a categorical exemption, as management and handling of a material stream changes, then that facility and/or activity must comply with Chapter 173-350 WAC.</u></p> <p>The applicability statement in Section 173-350-020(1) should be definite and unambiguous that when a facility and/or activity no longer operates within the categorical exemptions provided, then that facility and/or activity must comply with the applicable sections of the rule. For example, contaminated soil which has moved and is no longer at or near the generation point at a project site or steel slag that has been discarded and abandoned. This section should also guide the facility</p>	<p>B-10-01</p> <p>A reference to WAC 173-350-021 was added to the applicability section. With regards to clarity about conditional exemptions based on the authority in RCW 70.95.305, conditional exemptions are found throughout the rule, not in 173-350-020. Each has language included that reflects the enforcement provisions of RCW 70.95.315 which may include a requirement to apply for a solid waste permit and other enforcement actions. The exclusions from rule listed in WAC 173-350-020 are activities that Ecology either views as not solid waste handling or are activities governed by other rules, not Chapter 173-350 WAC.</p>

operator to Section 173-350-021, Determination of Solid Waste, since a material that may have been initially exempted from the rules, via the Applicability section, may, depending on the handling and management of the material, be considered a solid waste if the material meets any of the seven Determination of Solid Waste criteria, as provided by Ecology.

[Commenter: B-10]

<p>16. Effective Dates</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-12-18</p> <p>WAC 173-350-030 (1) Is the intent of this language to indicate that all units at a facility (including existing) must conform to the standards in this chapter if/when a new unit is added to the facility? Or are these standards limited to the new units themselves? (Note: this section is called “Effective Dates”).</p> <p>[Commenter: A-12]</p>	<p>A-12-18</p> <p>The timelines are meant to apply to individual units. Ecology revised language to remove reference to the entire facility.</p>
<p>A-06-02</p> <p>Section -030 Effective dates</p> <p>Page 6, Subsection (3)(ii) – Depending on local jurisdictions, it may be difficult for existing permit exempt facilities, such as MRF’s, now needing a solid waste permit to comply with SEPA requirements in order to submit a “complete permit application ... within twelve months...” per the proposed rule. From reviewing Section -715 (1)(e), a solid waste permit application is <u>not</u> ‘<u>complete</u>’ until “Evidence of compliance with chapter 197-11 WAC, SEPA rules, including the SEPA lead agency’s determination”, among other information described in this Section -715.</p> <p>The TPCHD is concerned with proposed time limit given that <u>existing</u> permit exempt facilities may need a solid waste permit. Per the proposed rule, these existing facilities</p>	<p>A-06-02</p> <p>Ecology agrees that local land use and other decisions may influence the ability for an operator of an existing permit-exempt facility that is required to obtain a solid waste permit to assemble all necessary materials in order to submit a complete application in accordance with WAC 173-350-710 and 715. Language was added to allow for up to two requests for six month extensions to the local permitting agency. Approval requires written concurrence by Ecology.</p>

will have to close if the SEPA “determination” cannot be issued within the one-year window. The TPCHD currently does not process SEPA applications for solid waste handling facilities needing a permit. The TPCHD relies on the applicable jurisdictional planning departments to process such SEPA applications when a permit is required to be issued for a newly established solid waste handling facility. The proposed rule may be requiring jurisdictional health departments to be the “lead agency” for these existing permit exempt facilities now needing only a ‘solid waste permit’. For the TPCHD, this development of procedures to process SEPA applications and determinations could take a considerable amount of time. Therefore, in such circumstances, will Ecology facilitate “lead agency” permit status for jurisdictional health departments where SEPA is now triggered only due to the requirement for issuance of a solid waste permit to such existing permit exempt facilities?

[Commenter: A-06]

<p>17. On-site storage collection transportation</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>O-01-01</p> <p>CHB is concerned about several components in the proposed amendment of WAC 173-350, including less required documentation and permit exemptions for on-site storage of contaminated soil and dredged material.</p> <p><i>On-site Storage</i></p> <p>While the goal of this amendment may have been to simplify the process of solid waste handling in Washington, one concerning result is the encouragement of storing solid waste on-site. The proposed standards combine significant permit exemptions, less required documentation and reporting, and expanded regulatory flexibility over impervious surfaces and weather protections - all changes that make for less environmentally protective standards. The encouragement of onsite storage makes leachate from those materials into the surrounding environment, especially groundwater, more likely.</p> <p>[Commenter: O-01]</p>	<p>O-01-01</p> <p>In the previous version of the rule, the piles section (WAC 173-350-320) would not be applicable to piles of material until after a certain amount of time. For example, the piles section would not be applicable to contaminated soils or dredged materials until 90 days had passed. In the adopted rule, these piles will be regulated during the 90 days being allowed for exemption. Any issues could be identified and addressed sooner in the adopted rule because the piles section is applicable; creating a more protective standard.</p> <p>The previous version of the rule provided exemptions for inert wastes, wood waste used for fuel or as a raw material, wood derived fuel, and agricultural waste on farms. In the previous version of the rule only exempted inert wastes over 250 cubic yards required notification. None of the exemptions required reporting. In the adopted rule, notification and reporting is required for wood waste, wood derived fuel, nonferrous metals, brick, cured concrete, and asphaltic materials over 250 cubic yards.</p> <p>In the adopted rule, the piles permitting design section [WAC 173-350-320(4)] does provide more flexibility in meeting impervious surface requirements. However, the flexibility provided can only occur if the applicant can demonstrate that soil and groundwater will be protected.</p>
<p>A-06-14</p> <p>Section -300 On-site storage, collection, and transportation standards</p>	<p>A-06-14</p> <p>Ecology did not make additional changes to WAC 173-350-300(3), Collection and transportation standards. The changes that were made were strictly intended to promote consistency throughout the</p>

Subsection (2)(b)(iii) – The TPCHD’s experience is that walking-floor/live-bottom transfer trailers can leak liquids from the trailer’s floor (sometimes significantly: late spring Western Washington curbside yard waste, for example), either by the trailer’s inherent construction technology and/or due to wear and tear. Therefore, for these “detachable containers” that are known to leak, the standard in this section of the rule needs to also require an alternative to “nonleaking”. The TPCHD recommends that a sentence be added to this item (iii) to include: “or proper containment and management of spilled/leaking leachate at the staging areas”.

Providing this alternative to simply “nonleaking” in these circumstances would provide the generators/haulers/site owners and the jurisdictional health departments the regulatory standard to properly contain and manage leachate at the staging areas for walking-floor/live-bottom transfer trailers.

[Commenter: A-06]

rule. The collection and transportation standards in WAC 173-350-300(3) include language on inspection and maintenance, record keeping, and leakage. Facilities where transportation vehicles are maintained and cleaned and may possibly leak may be subject to the requirements of Ecology's Industrial Stormwater General Permit to ensure proper management of any on-site spillage resulting from leaking containers. Leachate leaked from transport vehicles and trailers during transportation on public roadways is subject to response by the Washington State Utilities and Transportation Commission.

<p>18. Shingles</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-15-01</p> <p>[Oral testimony] Troy Lautenbach here. I just want to comment to the asphalt shingles scenario to prove my earlier point, the fact that if I have to process my asphalt shingles and then pay them to utilize them in their asphalt plant, they will need to get a solid waste handling permit per the 021 standards. I would suggest that we reexamine that.</p> <p>[Commenter: B-15]</p>	<p>B-15-01</p> <p>Please see response to comment A-21-02.</p>
<p>OTH-01-01</p> <p>[Oral testimony] Hi this is McKenna Morgan. I am with Cascadia Consulting Group, here on behalf of the King County LinkUp Market Development Initiative.</p> <p>And LinkUp is working to advance recycling and support market development for three-tab asphalt shingles through the use in asphalt paving mix. This is an effort that has been ongoing since, for, more than a decade, and has included financial funding through DOE’s CPG program, so we know that this is an area of great interest for the State. As you may know asphalt shingles and pavement production not only keep this recyclable material out of the landfill; it also develops/delivers substantial environmental benefits.</p> <p>Using recycled asphalt shingles in place of virgin petroleum based asphalt binder and paving mix, at the levels authorized by the State Department of Transportation can reduce greenhouse gas emissions impacts of asphalt</p>	<p>OTH-01-01</p> <p>Please see response to comment A-21-02.</p>

mix by 7%. In a study by the U.S. EPA in 2013, found that using asphalt shingles reduced the greenhouse gas emissions of asphalt paving mix production by a much more substantial amount than the use of warm-mix production technology, which is the other major strategy for reducing emissions associated with asphalt paving mix production. Recycling asphalt shingles into pavement is a win-win. It conserves resources, reduces pollution, and decreases the flow of a valuable material into landfills.

The LinkUp program is cognizant of the issues that have arisen in the past due to stockpiles of asphalt shingles by misguided or bad actors, but we have also have direct experience seeing successful asphalt shingle recycling that can occur when this material is managed as an integrated element of asphalt production by asphalt producers. And that is where we see great potential for increased recycling of asphalt shingles in Washington State.

The proposed changes to 173-350 standards have the potential to significantly affect the recycling of three tab asphalt shingles in Washington. And we have concerns that they may have a negative effect on asphalt shingles recycling if they have permitting implications for asphalt producers. And so I am here on behalf of LinkUp to seek some clarity about how the proposed changes will apply to the handling and the recycling of three-tab asphalt shingles.

We encourage the Department of Ecology to adopt language that protects the land and waters of our beautiful state, while also ensuring that the climate benefits of recycling asphalt shingles can be realized through responsible handling and increased recycling of this material in coming years.

I specifically have a question about section 21 and the determination of solid waste. Our

interpretation of this section is that three tab asphalt shingles possessed by asphalt producers, once ground and ready for use in asphalt mix production would not be considered a solid waste, so long as the material is stored and managed to preserve its value. And stored in a manner that presents little or no risk to human health and the environment. Asphalt producers already operate under sand and gravel permits, so the ground asphalt shingle material onsite at these facilities would be subject to these existing permit requirements, which involve stormwater discharge monitoring and management. We assume in our interpretation that operations that meet those sand and gravel requirements, would be considered to be in compliance with the requirements of section 21 part 3, and we're hoping that Ecology can confirm that our interpretation of this section as it pertains to recycled asphalt shingles is correct.

And then secondly, in section 320 for piles used for storage and treatment, Table 320(a) provides the possibility of exemption from solid waste permits for holders of sand and gravel permits with asphaltic material onsite but does not currently extend the same exemption for asphalt roofing shingles that would be used in asphalt mix production in a similar manner as asphaltic material. Again, because asphalt plants already operate under sand and gravel general permits but the explicit requirements for stormwater discharge monitoring and management. Our review of those sand and gravel permits related to stormwater management and dust control, our interpretation of that is that those requirements are equal to or more stringent than requirements that would be laid out for outdoor piles under the solid waste handling regulations. So our question is because asphalt plants are already required to be permitted, already subject to local health department oversight, and already responsible for regular monitoring and reporting related to stormwater management, for these permitted facilities that have three-tab asphalt roofing shingles onsite for processing and use in

<p>asphalt mix production, we would strongly encourage the Department of Ecology to include an allowance in Table 320 for the sand and gravel general permit to apply to asphalt shingles as well in lieu of the solid waste handling permit in line with the allowance that is made for asphaltic materials. And that's it.</p> <p>[Commenter: OTH-01]</p>	
<p>B-08-01</p> <p>The current language associated with the update to WAC 173-350 - Solid Waste Handling Standards does not meet the state's commitment to reducing and recycling waste wherever possible. By specifically excluding tabbed roofing shingles from exemptions listed in Table 320-A, the state will be placing a prohibitive burden on asphalt producers who repurpose tabbed roofing shingles into Recycled Asphalt Shingles (RAS) for usage in hot mix and cold mix asphalt. Operations under existing permits, such as the water quality sand and gravel general permit, is more restrictive than the solid waste permit requirements and achieves the same goal of effectively protecting water quality. Instead of reuse, this resource would be diverted to landfills instead of providing a benefit to the environment or our communities.</p> <p>The benefits of recycling Construction and Demolition (C&D) debris are documented in the DOE's February 2015 study, "Benefits of Recycling: Metals, Paper, Construction Debris and Organics." C&D debris can be remade into "new building projects and the 2.8 million tons that was diverted from landfills in 2013 prevented over 100,000 tons of GHG emissions, equivalent to keeping 72,000 cars off the road." Asphalt producers provide great benefits to the public by recycling more materials each year than any other industry. In 2014, over 2 million tons of asphalt and concrete was recovered in the state of Washington, which is more than any</p>	<p>B-08-01</p> <p>Please see response to comment A-21-02.</p>

<p>other single waste stream. Materials that are being disposed of in landfills would otherwise be used to improve our state's transportation infrastructure.</p> <p>The DOE performed a study in 2010, called "Acceptable Uses for Recycled Asphalt Roofing in Washington State", which concluded that "Roofing materials bound in asphalt are not mobile in the environment. DOE does not expect these uses to go through an approval process under solid waste regulations." By updating WAC 173-350 to include tabbed roofing shingles as a solid waste, the DOE is directly contradicting its own findings. A like-permit exemption for tabbed roofing shingle recyclers who use this material exclusively for the production of asphalt should be included in Table 320-A of the rule update.</p> <p>In conclusion, we would encourage the DOE to meet its responsibility to reduce waste and encourage recycling by adding tabbed roofing shingles to the exemptions listed in Table 320-A for facilities who are covered under, and compliant with, their Sand and Gravel General Permits. This will increase the feasibility of recycling tabbed roofing shingles for operators who intend to use them in asphalt mix designs on county and state roadway improvement projects. This exemption, would be similar to the exemption currently granted for other recycled asphaltic materials. Our industry would like to work with the DOE to be a part of the solution to reduce landfill waste, increase recycling and protect the environment.</p> <p>[Commenter: B-08]</p>	
<p>B-13-01</p> <p>[Oral testimony]. Hi, my name is Steve Hitzel and I am with Granite Construction Company.</p>	<p>B-13-01</p> <p>Please see response to comment A-21-02.</p>

We operate a number of hot-mix asphalt production facilities across the state.

And my comment is, as currently written the Solid Waste Handling rule proposed changes do not encourage responsible waste reduction or recycling for the only currently endorsed method for recycling source separated three-tab roofing shingles. This is not in keeping with the DOE's legislative priority to reduce waste and encourage recycling. Asphalt producers should be able to use existing permits such as the water quality sand and gravel, or the construction stormwater general permits that currently meet or exceed the solid waste handling permit requirements for asphalt shingles. An exemption for shingles being 100% recycled in a hot-mix asphalt or cold-patch asphalt, should be implemented. This would harmonize with the DOE's own study titled Acceptable Uses for Recycled Asphalt Roofing in Washington State, which concluded that the use of asphalt roofing as part of a hot-mix asphalt or cold-patch does not need to go through an approval process under state solid waste regulation. As currently written, DOE is indeed adding the state solid waste regulation requirement and in essence discouraging and erecting barriers to the responsible operators who have historically shown very good compliance in operating under sand and gravel stormwater general permits. Asphalt producers are the problem solvers in diverting this from landfills to a 100% recycled use. We encourage Ecology to extend the solid waste handling exemption within Table 320A for source-separated roofing shingles stored for processing on property covered by water quality sand and gravel permit, in order to encourage responsible operators recycling asphalt shingles one-hundred percent into hot-mix or cold-patch asphalt. This exemption would be similar to the exemption now granted for other recycled asphalt materials. That's all.

[Commenter: B-13]

<p>A-14-01</p> <p>[Oral Testimony]. Okay, I am Kris Beatty with King County Solid Waste Division's Linkup Program, which has been involved in market development efforts for asphalt shingles since 2007. After a decade of work to develop a market for recycled asphalt shingles in asphalt pavement production, I am pleased to report that this local market is established and growing. This is not a material that has relied on unstable overseas markets for recycling to be viable, it's local.</p> <p>In the past three years, LinkUp is aware of hundreds of paving projects by multiple companies, that have been completed using hot-mix asphalt containing recycled asphalt shingles. Responsible for the recycling of more than 28 thousand tons of asphalt shingles that would otherwise have gone to waste. Asphalt shingles recycling is increasingly being conducted by asphalt paving mix producers. And this development is promising, but it's also emerging. If asphalt producers face barriers to collecting and processing asphalt shingles for use in paving mix production, progress in recycling this material may stall or worse recede. Without asphalt producers increasing involvement in collection, processing, and use of asphalt shingles in asphalt production, the environmental benefits of recycling that material will be lost. King County is as concerned as the Department of Ecology is, about orphan asphalt shingles piles that have been speculatively stockpiled. Asphalt paving mix producers have not been the source of those piles, and in fact in some cases have provided the solution to drawing those piles down. King County Solid Waste Division urges the Department of Ecology, to make clear in the rule language that asphalt producers collecting, processing and using asphalt shingles in asphalt production, are not subject to solid waste handling permit requirements. King County will be submitting more detailed comments and</p>	<p>A-14-01</p> <p>King County Solid Waste Division's Linkup Program has made great strides in regards to getting asphalt roofing shingles recycled properly. However, this is not the case statewide. The adopted rule has not changed from the previous rule in regards to asphalt roofing shingles. It is not clear what barriers asphalt producers are facing, maybe this will become clearer with the more detailed comments and suggestions referred to in the comment (addressed elsewhere in this summary). Ecology did not add language to the rule that would make asphalt producers collecting, processing and using asphalt shingles in asphalt production, not subject to solid waste handling permit requirements. The new section, WAC 173-350-021-Determination of Solid Waste, is the appropriate place to evaluate whether or not asphalt roofing shingles are solid waste or not. Ultimately, as asphalt shingles are regulated as recyclable solid wastes under the previous rule, and continue to be regulated as recyclable solid waste under the adopted rule, no additional barriers have been presented to recycling shingles.</p>
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<p>suggestions, and suggested changes to the rule language in writing. Thank you so much.</p> <p>[Commenter: A-14]</p>	
<p>A-12-06</p> <p>Regarding <u>unprocessed and ground asphalt shingles</u>, recommended revisions to <i>Definitions and Piles used for storage or treatment</i> sections, and a request regarding Department of Ecology’s interpretation of specific provisions of <i>Determination of solid waste</i>.</p> <p><i>WAC 173-350-100 Definitions</i></p> <p>This section adds a definition of asphaltic material and specifies that asphalt shingles are not covered, but does not provide a separate definition of asphalt shingles.</p> <p><i>WAC 173-350-021, Determination of Solid Waste</i></p> <p>King County Solid Waste Division’s interpretation of Section 021 is that asphalt shingles possessed by asphalt producers, once ground and ready for use in asphalt mix production, would NOT be considered a solid waste, so long as the material is stored and managed to preserve its value, and is stored in a manner that presents little or no risk to human health and the environment. Asphalt producers already operate under Sand & Gravel stormwater monitoring and management permits, so the ground asphalt shingles material onsite at these facilities would be subject to those existing permit requirements, which involve stormwater discharge monitoring and management. We assume that operations which meet those requirements would be considered to be in compliance with the requirements of Section 021 (3). Please confirm that our</p>	<p>A-12-06</p> <p>Please see response to comment A-21-02.</p> <p>Ecology does not think a definition of asphalt shingles is necessary.</p>

interpretation of this section as it pertains to recycled asphalt shingles is correct.

WAC 173-350-320, Piles Used for Storage and Treatment

Table 320-A provides the possibility of exemption from solid waste permits for holders of Sand & Gravel Permits with asphaltic material onsite but does not currently extend the same exemption for asphalt shingles that would be used in asphalt production in a similar manner as asphaltic material.

Asphalt plants already operate under Sand & Gravel General Permits that set explicit requirements for stormwater discharge monitoring and management. Our review suggests that the requirements set forth under the Sand & Gravel General Permits related to stormwater management and dust control are equal to or more stringent than the requirements laid out for outdoor piles under the solid waste handling regulations.

Asphalt plants are already required to be permitted, already subject to local health department oversight, and responsible for regular monitoring and reporting related to stormwater management. For these permitted facilities that have asphalt shingles onsite for processing and use in asphalt production, King County Solid Waste Division strongly encourages the Department of Ecology to include an allowance in Table 320-A for the Sand & Gravel General Permit to apply to asphalt shingles in lieu of a solid waste handling permit, in line with allowance made for asphaltic material.

King County Solid Waste Division recommends the following revisions be made:

Add definition to *WAC 173-350-100* as follows:

<p>“Asphalt shingles” means a type of wall or roofing shingles, including 1-2-/3-tab, architectural and dimensional shingles, that are made from asphalt, fiber (commonly fiberglass or cellulose), and surface granules of stone, ceramic, brick, or other materials. Asphalt shingles does not include modified bitumen, built-up, rolled roofing, or other types of non-asphalt roofing.</p> <p>Add line to WAC 173-350-320, Table 320-A as follows:</p> <p><i>Under the column heading “Waste Materials” add: Asphalt shingles.</i></p> <p><i>Under the column heading “Volume, Storage Time, and Capacity Requirements” add: None</i></p> <p><i>Under the column heading “Specific Requirements for Activity or Operation” add:</i></p> <p>(a) Store on an impervious surface.</p> <p>(b) Facility must hold and be in compliance with an active Sand & Gravel Stormwater Permit.</p> <p>(c) Use 100% of asphalt shingles onsite in asphalt pavement mix production.</p> <p>[Commenter: A-12]</p>	
<p>B-06-01</p> <p>Thank you for the opportunity to provide comments regarding the Proposed Rule Language for WAC 173-350. Lakeside Industries, Inc. operates 13 hot-mix asphalt plants in the State of Washington and is committed to preserving the environment through recycling. Where possible, we incorporate Reclaimed Asphalt Pavement</p>	<p>B-06-01</p> <p>Please see response to comment A-21-02.</p>

(RAP) and Recycled Asphalt Shingles (RAS) into new hot-mix asphalt for paving projects throughout Western Washington.

We are concerned about how the proposed rule language addresses RAS. As the proposed rule is currently written, there is no clear exemption from solid waste handling permitting regarding RAS. We believe this could impose costly and unnecessary permitting for recycling and material recovery facilities discouraging recycling of asphalt shingles.

To encourage continued recycling of asphalt shingles, we offer the following addition to Table 320-A in WAC 173-350-320 to allow an option for solid waste handling permitting exemption for asphalt shingle recycling:

[Comment included a copy of Table 320-A, Terms and Conditions for Solid Waste Permit Exemptions, that precludes inclusion here due to formatting issues. The commenter proposed adding a row (6) to the table with the following language:

- *Under the column “Waste Materials:” Source separated asphalt roofing shingles (tear off and manufactured waste) processing facilities with a water quality sand and gravel or construction stormwater general permit*
- *Under the column “Volume, Storage Time, and Capacity Requirements:” No volume limits*
- *Under the column “Specific Requirements for Activity or Operation:” Facilities that recycle these wastes must*

<p><i>comply with the recycling standards in WAC 173-350-210, including notification and reporting and must recycle 100% into hot mix asphalt or cold patch asphalt products.</i></p> <p>Lakeside is committed to reducing waste and recycling in a responsible manner in accordance with its existing Department of Ecology issued permits (e.g. water quality sand & gravel stormwater general permit) which already meet or exceed the proposed solid waste handling permit requirements for asphalt shingle storage and processing.</p> <p>[Commenter: B-06]</p>	
<p>B-07-03</p> <p>Piles Rule</p> <p>DOE currently supports the use of asphalt shingles in hot mix asphalt DOE publication 09-07-074 Acceptable Uses for Recycled Asphalt Roofing in Washington State</p> <ul style="list-style-type: none"> • Within the document the “use of (asphalt roofing) as part of hot mix asphalt or cold patch does not need to go through an approval process under state solid waste regulation” • Miles supports the inclusion of asphalt shingles under the piles section with the following language: <p><i>[Comment included a copy of Table 320-A Terms and Conditions for Solid Waste Permit Exemptions, that precludes inclusion</i></p>	<p>B-07-03</p> <p>Please see response to comment A-21-02.</p>

here due to formatting issues. The commenter recommended the following:

- *Under the column “Waste Materials:” Asphalt shingles*

- *Under the column “Volume, Storage Time, and Capacity Requirements:” None*

- *Under the column “Specific Requirements for Activity or Operation:”*
 - (a) Store on impervious surface*

 - (b) Facility must hold and be in compliance with an active Sand and Gravel Stormwater Permit or equivalent stormwater permit*

 - (c) Use 100% of asphalt shingles in asphalt pavement mix production*

In addition to better define the term asphalt shingle we propose to have the following definition in the draft rule:

Asphalt shingles: A type of wall or roofing shingles, including 1-/2-/3-tab, architectural and dimensional shingles, that are made from asphalt, fiber (commonly fiberglass or cellulose), and surface granules of stone, ceramic, brick, or other materials. Asphalt shingles does not include hot mopped, cold mopped, modified bitumen, built-up, rolled roofing, or other types of non-asphalt roofing.

<p>[Commenter: B-07]</p>	
<p>B-12-03</p> <p>Table 210-A Terms and Conditions for Solid Waste Permit Exemption. This is a well written table and will become very useful. We do suggest that Asphalt Shingles be added to (2).</p> <p>[Commenter: B-12]</p>	<p>B-12-03</p> <p>Please see response to comment A-21-02.</p>
<p>A-21-02</p> <p>Clarification is needed on the status of recycled asphalt shingles (RAS), once processed to meet specifications to be used as a component in hot mix paving. Would RAS still need to be regulated as a solid waste and would a hot mix producer need to obtain a solid waste handling permit to have such material piled on site for use as part of a hot mix blend? What manner of storage would be required for such material to present little or no risk to human health and the environment?</p> <p>[Commenter: A-21]</p>	<p>A-21-02</p> <p>Ecology is not clear how the proposed changes to the rule standards have the potential to significantly affect the recycling of asphalt roofing shingles in Washington. Successful recycling of asphalt roofing shingles in hot mix or cold patch asphalt products occurred under the previous version of the rule and very little has changed.</p> <p>The study by Ecology (Acceptable Uses for Recycled Asphalt Roofing in Washington State) did conclude the use of asphalt roofing shingles in hot mix or cold patch did not have to go through an approval process under state solid waste regulations. The key word is "use." Storage or anything else about this material before its actual "use" (put into hot mix or cold patch applications) was not addressed.</p> <p>Ecology does not believe ground asphalt roofing shingles at asphalt producing facilities with sand and gravel permits would meet the requirements in WAC 173-350-021(3). The materials is not recycled until it goes into the hot mix or cold patch and it is not ready for reuse as it does not meet the reuse definition in WAC 173-350-100.</p> <p>Ecology understands how some might feel the sand and gravel permit should be sufficient to cover the management of asphalt roofing shingles because they may already be managing hardened and broken up asphalt. However, it is clear the sand and gravel</p>

	<p>permit is not meant to cover the management of asphalt roofing shingles. See Appendix A of the permit. Appendix A, NAICS/Ecology code ECY001 Asphalt Recycling on page 53 reads in part (emphasis on highlighted portion): "The processing (including, but not limited to, crushing, fracturing, sorting, storing, stockpiling, grading, and washing) of hardened asphalt (not including asphalt roofing products) to produce a reusable product." The sand and gravel permit specifically excludes the coverage of asphalt roofing products.</p> <p>Some commenters have suggested "other applicable NPDES permits" to be applied in order to exempt asphalt roofing shingles. It is unclear which permits are being referred to and without those specifics it is hard to determine if they are appropriate. For these materials, other permits would most likely need to be modified to include asphalt roofing shingles and are therefore not applicable.</p> <p>Ecology does not anticipate making changes in this area.</p> <p>Under the new rule, Ecology would envision the management of asphalt roofing shingles to be regulated similarly as they are now. This could take the form of a piles permit under the piles section (WAC 173-350-320) or an exemption under the recycling section (WAC 173-350-210). If a source separated recyclable material, asphalt roofing shingles might qualify for the exemption in Table 210-A(3) if the other requirements under this exemption are met. The section the material is regulated under would dictate storage requirements.</p> <p>The variance and permit deferral processes are also tools available to influence management of asphalt roofing shingles under WAC 173-350.</p>
A-16-04	<p>A-16-04</p> <p>Comment noted.</p>

<p>-100 "asphaltic material". Extremely helpful that shingles are spelled out as not asphaltic material.</p> <p>[Commenter: A-16]</p>	
<p>O-11-01</p> <p>[Oral testimony]. Dave Gent with the Washington Asphalt Pavement Association. I'd just like to say asphalt plants already generally operate under sand and gravel permits, that set explicit requirements for stormwater discharge. We understand the concerns related to piles without a current market, but asphalt plants that intend to use recycled asphalt shingles and hot mix asphalt act as a solution to this problem. We point out that the DOE's own publication on acceptable uses of recycled asphalt shingles in Washington State ends with the conclusion that the use as part of hot mix asphalt or cold patch does not need to go through an approval process under state solid waste regulation. And we would like this conclusion to be realized, through specific exemption in category Table 320a for recycled asphalt shingles to be used in hot mix asphalt or cold patch. That's it.</p> <p>[Commenter: O-11]</p>	<p>O-11-01</p> <p>Please see response to comment A-21-02.</p>
<p>O-03-01</p> <p>Thank you for considering the Washington Asphalt Pavement Association's (WAPA) questions and suggestions as part of Department of Ecology's rulemaking process at WAC 173-350. I testified on behalf of WAPA at the March 6, 2018 public hearing. This letter is intended to serve as a more extensive public comment document, for your consideration and action.</p> <p>WAPA represents the vast majority of hot mix Asphalt Producers in Washington State. WAPA speaks on public policy matters as an advocate</p>	<p>O-03-01</p> <p>Please see response to comment A-21-02.</p>

for the private companies that manufacture in excess of 98% of the hot mix asphalt and cold patch asphalt produced in the state.

Our members believe that WAC 173-350-320 should include an additional, focused exemption for recycled asphalt shingles specifically intended for recycling into hot mix asphalt or cold patch asphalt products. WAPA respectfully requests that the DOE respond to the proposal outlined herein and incorporate WAPA's suggestions as part of a final WAC 173-350 rule. WAPA members are specifically focused on the treatment of source separated tabbed asphalt shingles routinely processed into recycled asphalt shingles (RAS).

As currently written the WAC 173-350 proposed rules do not encourage responsible waste reduction/ recycling for the only method for recycling tabbed roofing shingles endorsed by the DOE. The current treatment of recycled tabbed shingles is also out-of-step with the overarching statutory objectives for solid waste management and recycling contained in RCW 70.95.020. To comply with the goals of encouraging "the development and operation of waste recycling facilities", we suggest that the DOE incorporate a positive, responsible path for recycling tabbed roofing shingles. This would harmonize with the DOE's own study titled "Acceptable Uses for Recycled Asphalt Roofing in Washington State" which concluded that "Use of (asphalt roofing) as part of hot mix asphalt or cold patch does not need to go through an approval process under state solid waste regulation (emphasis added)."

As currently written, DOE is indeed adding a state solid waste regulation requirement. The current rule, as drafted, will discourage waste reduction by erecting additional barriers to potential tabbed asphalt shingle recycling by Asphalt Producers. WAPA submits that hot mix Asphalt Producers are the "problem solvers" for diverting roofing shingles into a 100% recycled

use and we propose providing a responsible path to encourage RAS use, in keeping with DOE's legislative mandates and the conclusions of its own study.

WAPA proposes that any hot mix Asphalt Producer that is recycling source separated tabbed shingles should be able operate under its existing DOE permits (e.g. water quality sand & gravel or construction storm-water general permits). In practical terms these existing permits already meet or exceed the proposed solid waste handling permit requirements for asphalt shingle storage. This being the case, we propose that an additional exemption, similar to those currently proposed within Table 320-A, be added to incorporate tabbed roofing shingles destined to be processed into RAS. The exemption would specifically cover the recycling of source separated tabbed asphalt shingles which are being 100% recycled as RAS into hot mix asphalt or cold patch asphalt.

As you know, hot mix Asphalt Producers have historically shown very good compliance in operating under sand & gravel storm water general permits and have demonstrated a high level of responsible operations for many years. Tying the proposed RAS exemption to known operators with existing permits creates a natural separation between speculative shingle recycling and a proven population of responsible operators that are motivated to protect the other industrial and mining activities already covered within existing permits.

We encourage Ecology to extend a solid waste handling exemption within Table 320-A for source separated tabbed roofing shingles stored for processing on property covered by a water quality sand and gravel permit, in order to encourage responsible operators that intend to recycle asphalt shingles 100% into hot mix or cold patch asphalt. This proposed exemption would be similar to the exemption now granted for other recycled asphaltic materials. The

proposed Table 320-A update would be as shown below:

Table 320-A

Terms and Conditions for Solid Waste Permit Exemptions

Waste Materials Volume, Storage Time, and Capacity Requirements Specific Requirements for Activity or Operation

WAPA proposed added RAS exemption

(6) Source separated tabbed asphalt roofing shingles (tear off and manufactured waste) processing facilities with a water quality sand and gravel or construction stormwater general permit No volume limits

Facilities that recycle these wastes must comply with the recycling standards in WAC 173-350-210, including notification and reporting and must recycle 100% into hot mix asphalt or cold patch asphalt products.

WAPA believes that this proposed update to the final WAC Code 173-350-320 rule will responsibly encourage tabbed roofing recycling without erecting unneeded additional permitting burdens and will create a path toward development and operation of responsible waste recycling facilities specifically tied to hot mix asphalt and cold patch asphalt production. As per the WAC 173-350-320 rule, the conditions for management of the waste in piles will apply as currently proposed for the other exempt waste materials listed in Table 320-A.

The use of RAS in hot mix asphalt and cold patch asphalt cannot completely displace the volume of tabbed asphalt roofing shingles currently being disposed of in regulated landfills, but it can make a substantial impact.

With encouraging recycling rules in place, I can foresee expanding current RAS use in western Washington from approximately 9,300 tons annually to in excess of 70,000 tons annually as operational uncertainty is removed and permitting barriers fall for the region's hot mix Asphalt Producers.

If necessary for clarity, WAPA offers that source separated tabbed asphalt shingles, as used in Table 320-A, could be defined as "tabbed wall or roofing shingles that are made from asphalt, fiber (commonly fiberglass or cellulose) and surface granules of stone, ceramic, brick, or other material. Asphalt shingles as defined for the WAC 173-350-320 rule do not include modified bitumen or tar products, built-up "hot tar" roofing, rolled roofing, or other types of non-asphalt roofing not commonly identified as tabbed roofing shingles."

In closing, I note that just yesterday the DOE reached out via ListServ to the post-consumer plastics and unsorted paper recycling community, striving to turn the current market disruption for these items into "an opportunity to develop long-term plans to strengthen local processing capacity, identify and grow new markets, reduce contamination and deepen partnerships." I would point out that, by instituting the tabbed roofing shingle exemption proposed above, DOE would be accomplishing these goals for asphalt shingles by encouraging the use of RAS. An additional bonus is that the entire waste stream, "from roof to road", will be locally produced, controlled and regulated. The basic hot mix asphalt commodity can be reused and recycled perpetually in local asphalt production facilities throughout the region.

Thank you for your review and consideration of this proposal.

[The comment included three footnotes: State of Washington DOE Publication no. 09-.7-007,

Conclusions, final paragraph, Page 5; King Co. Solid Waste LinkUp testimony, March 9, 2018. 28,000 tons of RAS use in the last three-year period; and Approximate regional production using 1.5% projected RAS incorporation to calculate estimate.]

[Commenter: O-03]

<p>19. Determination of Solid Waste</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-14-01</p> <p>It appears this commenter may have referenced the incorrect rule text (please note if you believe that is the case).</p> <p><u>WAC 173-350-110 Determination of solid waste</u></p> <p>(3) A material is no longer a solid waste if it meets all of the criteria in (a) through (f) below:</p> <p>(d) The material has positive market value, as indicated by available or sufficient markets for the material. Paying a person to remove or process the material for recycling, disposal, or incineration is not positive market value, nor is paying a discounted amount for removal or processing;</p> <p>Comment:</p> <p>The issue of concern is that if of a recycling facility is being paid to take a commodity than it must get a permit. This will be a deterrent to advancing recycling opportunities.</p> <p>During the public hearing Ecology staff expressed concerns of what I view as “speculative stockpiling”. We agree this is a legitimate and valid concern for regulators as well as industry. This situation can turn bad for the environment and give recycling</p>	<p>B-14-01</p> <p>Under the previous rule, both recycling facilities and material recovery facilities must either obtain a permit or meet the criteria for permit exemption. This requirement is not tied to whether the material has value, so even facilities that pay for the recyclable materials they process into new products are still considered solid waste handling facilities. The adopted rule is therefore more lenient than the previous rule by allowing materials that have been recycled into products or commodities with positive market value to no longer be considered recyclable materials (which by law are a subset of solid waste). As facilities under the previous rule must either obtain a permit or meet the conditions for exemption, the adopted rule presents no additional barriers to recycling.</p>

<p>a black eye. However, requiring a “positive” market and further defining it to require payment by the receiving company will have a negative effect on the development of remanufacturing facilities and end users since getting a solid waste handling permit is onerous and can act as a deterrent. Additionally, some “would-be” facilities may not be able to obtain a Solid Waste Handling Permit due to locational zoning.</p> <p>Examples where the market is such that an operator can charge to take a commodity is our roofing industry and sheetrock recycling industry and in the past our cardboard markets have been negative as well. Clearly, we want to promote these markets not hinder.</p> <p>We propose the following language (or similar) to address speculative stockpiling. Please keep in mind that other proposed changes in sections 210 and 320 will also help in responding to speculative stockpiling.</p> <p><i>Paying a person who does not have an established use and associated recycling facility to remove or process the material for recycling, disposal, or incineration is not positive market value, nor is paying a discounted amount for removal or processing;</i></p> <p>[Commenter: B-14]</p>	
<p>B-14-10</p> <p>WAC 173-350-240 Energy recovery and incineration facilities</p>	<p>B-14-10</p> <p>Materials that fall out using WAC 173-350-021 are no longer a solid waste. The exemption allows the flexibility for mills accepting unsorted wood waste</p>

<p>Table 240-A Terms and Conditions for Solid Waste Permit Exemption</p> <p>Comment: Wood waste and Wood derived fuel and pulp waste are identified as “Waste Materials” that qualify for a permit exemption upon compliance with conditions (a) through (d) within this table.</p> <p>Question: If these materials are properly prepared to specification prior to entering the facility, (such as a pulp mill), and the mill properly handles the material as a commodity, does proposed section 021, that defines what is a solid waste, move this material out of solid waste realm therefore making the conditions set forth under Specific Requirements in this table irrelevant unless the material becomes a waste once again? In other words, the Health Department does not need to be allowed to inspect or approve in writing the material that now qualify as products that are stored, since the facility is not handling a solid waste?</p> <p>[Commenter: B-14]</p>	<p>for a tip fee (solid waste) to still operate without a permit.</p>
<p>O-09-02</p> <p>Positive market value: The CR-102 says that one of the criteria to not be a solid waste is for the material to have "positive market value". Part of the determination of "positive market value" is to not pay for removal, but it may often be possible for contractors to pay for the removal of material, yet the material still retains a net positive market value. Broken concrete, in particular, is heavy and costly to transport. But these transport costs, plus the costs of reprocessing the material, minus the proceeds from selling the material for re-use is still significantly less than the cost of disposing at a</p>	<p>O-09-02</p> <p>Please see response to comment B-07-02.</p>

<p>landfill. Recycling the concrete saves money and helps WSDOT fulfill the directive it received from the Legislature to use more recycled concrete in products. We suggest a definition of "net" positive market value that reflects this scenario.</p> <p>[Commenter: O-09]</p>	
<p>O-07-01</p> <p>Thank you for considering the Association of Washington Business's (AWB) questions as part of Department of Ecology's rulemaking process at WAC 173-350. AWB members have asked the following questions about Ecology's implementation of the proposed language post-adoption of the CR-103. AWB appreciates the Waste 2 Resources Program responding to these inquiries either as part of a final rulemaking summary or in formal correspondence with AWB.</p> <p>How does Ecology intend to apply the test for "positive market value" proposed at 173-350-021(3)(c) WAC in practice?</p> <p>[Commenter: O-07]</p>	<p>O-07-01</p> <p>WAC 173-350-021(4) places the obligation of defending the positive market value determination on the generator or person in possession of the waste, "In an action to enforce the requirements of this chapter, the generator or person in possession of the material must demonstrate that the material is no longer a solid waste." The burden of proof lies entirely with the generator or person in possession of the material to show that it meets all the requirements of the rule, including demonstrating that the material has positive market value.</p>
<p>B-01-03</p> <p><u>The Positive Market Valuation test.</u> The Agency has proposed the use of market value proposition (page 4) as a test of whether a material is defined as a solid waste. Materials with a positive market value at the point of generation are not considered solid wastes, while most other materials fail the test and are deemed solid wastes. This is misguided, as the Agencies interpretation favors those materials with high inherent market values (steel, other metals, papers etc.) over other materials</p>	<p>B-01-03</p> <p>As all recyclable materials are a subset of solid waste under Chapter 70.95 RCW, and as recycling is, again by law, a solid waste handling activity, categorizing a material as a solid waste cannot hinder a material's ability to be recycled. The inverse is true, a material cannot be recycled unless it <i>is</i> a solid waste. Once a material has been recycled into a product or commodity with positive market value, it can then leave the regulatory oversight of the solid waste handling regulations.</p>

with lower inherent market value. In the case of broken concrete and other similar materials that are heavy expensive to transport, the agency should consider the larger picture. Broken concrete is an inherent part of the economy and the healthy recycling of this material diverts it from consuming valuable landfill space. The agencies test pre-determines this material to be considered a solid waste which hinders the ability for this material to be recycled. For example:

Consider a ton of concrete generated at a concrete plant from excess material returned from a jobsite. The generator has a choice of either sending this material to a landfill for disposal at \$46/ton or sending this material to a local concrete recycler for \$10 / ton. Naturally the generator sends this material to a recycler as this represents a cost savings of \$36/ ton and the generator sees this decision as creating positive value for his/her business. The concrete recycler receives the ton of concrete and then will spend between \$10 and \$12 per ton to store, move, crush and sell the material ultimately for \$6 / ton. The concrete recycler ultimately generates \$6/ ton positive cash flow.

In the case where the concrete is sent to landfill no positive market value is created. The generator incurs a fee of \$46 and the recycler who does not receive the ton of raw material is deprived the ability to generate income.

The Agency should re-consider the Positive Market Valuation and consider that the recycling of this material is often a two-party operation. The language should be modified to "net positive market value".

<p>Materials which have a net positive value in the market should be exempted from solid waste regulations.</p> <p>[Commenter: B-01]</p>	
<p>A-13-01</p> <p>The City of Vancouver appreciates the considerable advisory committee work that went into the rulemaking process for the Solid Waste Handling Standards. The online recordings on the draft standards were very helpful in our understanding of the proposed changes as well. In reviewing the proposed changes to the standards, Vancouver has specific concerns in relation to environmental protections and, specifically, water quality degradation both in terms of surface water runoff and groundwater as it relates to our sole source drinking water aquifer. The proposed standards appear to be less restrictive and "deregulate" some waste streams.</p> <p>First, the new section WAC 173-350-021 "Determination of solid waste" attempts to make a distinction between commodities and waste by assessing the market value of the material. This addition of "commodities" in this section creates a burden on local municipalities to make a challenging determination of "positive market value" for materials historically considered solid waste and regulated by local public health agencies. Scrap metal operations are of particular concern to the City based on experience with existing, regulated facilities that still struggle to meet water resource protection standards due to highly variable material, uncovered stockpiling of mixed material for processing, and common contaminants in the material (oil, residues, coolants, etc.) that end up in the stormwater system, pollute water bodies, and violate municipal water resource standards. Because barriers to entry into the scrap metal business are very low, with the additional deregulation of</p>	<p>A-13-01</p> <p>As the commenter noted, the determination of solid waste allows for some materials previously regulated as wastes to leave the oversight of the solid waste handling regulations. Materials with positive market value, things that can be bought and sold, such as metal can indeed fall out of regulatory authority under the adopted rule. Ecology understands that some operations handling such materials may fail to adequately manage materials to prevent a release to the environment. However, Ecology also believes that other laws and regulations can be utilized for many scenarios, such as water quality impacts mentioned by the commenter. It is true that the solid waste handling standards can be useful to maintain compliance, and Ecology hopes that materials that clearly are still wastes, even recyclable materials, will still be adequately regulated under the adopted rule.</p>

this industry, there is a potential for increased small-scale operations with speculative scrap metal accumulation and poor housekeeping, which will inevitably pollute stormwater and degrade water quality. Further, in addition to increased regulation of pollutants on the back end (rather than ensuring companies have systems in place to prevent pollution in the first place), local municipalities would be saddled with the burden of obtaining documentation to support the determination of whether a material is solid waste or a commodity. These determinations and the necessary technical oversight are better suited to public health districts and we urge Ecology to keep these facilities as regulated or even exempted solid waste facilities.

Related to scrap metal operations, the definition of source separated materials seems to exempt similar operations. Table 210-A indicates these source separated materials are describes as "examples of individual material streams are loads composed solely of cardboard, mattresses or metal of one type or several types". Since scrap metal operations typically pay the generator, this seems to indicate in the previous definition that it is a commodity. Separating metal materials from other solid waste in order to resell the metal material appears to be a solid waste handling operation. This is a more appropriate application of the standards because very little scrap metal comes into a facility without processing. Again, keeping scrap metal facilities as a solid waste operation under the local public health authority's oversight is our request.

Without public health authority oversight, the only requirement for scrap metal operations will be a business license, which is not subject to regulatory or enforcement oversight. In the past, business licensing information has not been quality controlled and despite over a year of monitoring incoming licenses, the City's water resource protection program has found the information lacking with nearly half of simple

<p>mailings returned. We are not confident scrap metal operations will get licenses or that licensing will provide any oversight or incentive for housekeeping practices that are protective of water resources.</p> <p>[Commenter: A-13]</p>	
<p>A-17-01</p> <p>It appears that this code update appears less restrictive than the current solid waste handling standards. As expressed in previous draft version comments, Clark County Public Health (CCPH) has concerns regarding potential ramifications of "deregulating" solid waste streams and would prefer to retain authority to regulate recyclable materials.</p> <p>The addition of the term "commodity" places the burden on local municipalities to determine the market value of commodities to determine the solid waste status is unrealistic. Additionally, given the global climate at this time in the variable recycling markets, recent changes have made the determination of "positive market value" for a solid waste/commodity even more challenging. For solid waste enforcement, it could be challenging in some instances to obtain documentation to support material truly IS a solid waste.</p> <p>In 2014, RCW 19.290 (Metal Property) and WAC 208-70 (Scrap Metal Business-Recycler-Processor- Supplier) were adopted granting Department of Licensing permitting oversight regarding scrap metal businesses. Clark County Public Health staff have actively pursued several investigations in conjunction with DOL staff. Prior to CCPH involvement, many of these "pop-up" scrap metal "recycling" locations created a public nuisance, attract illegal dumping and accept scrap metal that contain properties that threaten public health and the environment (including but not limited to,</p>	<p>A-17-01</p> <p>As the commenter noted, the determination of solid waste allows for some materials previously regulated as wastes to leave the oversight of the solid waste handling regulations. In particular, materials that have either been recycled into new products or commodities, as defined, can exit the solid waste world, and some materials, like scrap metal, that retain value may never become solid wastes. Ecology knows that the solid waste handling standards have been useful in addressing pollution at some operations such as scrap metal yards, and that this tool will no longer always be available under the adopted rule. Ecology hopes other environmental laws and regulations can be used for compliance in those cases. While the previous definition of recycling is narrower than the definition in the adopted rule, Ecology hopes that materials that clearly are still wastes, even recyclable materials, will still be adequately regulated under the adopted rule.</p>

<p>leaking of various fluids from vehicle parts, lead-acid from batteries, refrigerants etc.) Scrap metal collection and recycling facilities are each unique in regards to volume, type and source of waste handled. Regretfully, scrap metal is quite often an unsightly and dirty business activity and a source of contaminated stormwater discharges. During a recent exempt solid waste facility inspection, CCPH staff observed storm water violations associated with scrap metal handling activities. Had this activity been outside the scope of solid waste handling, the violation may have continued to compromise public health and the environment. Again, CCPH staff would prefer to retain authority to regulate recyclable materials as solid waste.</p> <p>[Commenter: A-17]</p>	
<p>A-17-02</p> <p>Under source separated materials, Table 210-A lists, "accept only wastes segregated into individual material streams. Examples of individual material streams are loads composed solely of cardboard, mattresses, or METAL of one type or several types. More than one individual material stream may be accepted at the same facility, but mixed waste materials, including comingled recyclable materials, may not be accepted under this exemption"; it may cause confusion to include metal in this list as prior definitions would exclude metal as a solid waste as it is a "commodity".</p> <p>[Commenter: A-17]</p>	<p>A-17-02</p> <p>With market fluctuations, metal may or may not always be a commodity, so it is still an appropriate example.</p>
<p>B-05-01</p> <p>Longview Fibre Paper and Packaging, Inc. dba KapStone Kraft Paper Corporation ("KapStone") has reviewed the draft rules that are currently on public comment. KapStone operates an integrated pulp and</p>	<p>B-05-01</p> <p>Comment noted. Ecology commends KapStone's effort to close the loop on waste generation and recycling. Activities described in the comment may</p>

<p>paper mill in Longview, WA. The mill has operated on this site for over 90 years utilizing a mix of virgin and recycled fiber to produce containerboard and specialty paper. As part of the company's efforts to minimize its environmental footprint, KapStone supplements its fossil fuels with carbon neutral biomass, in the form of conventional hogged wood (hog fuel), Paper Recycling Residuals (referred to as PRR or OCC rejects) and recovered fiber (wastewater treatment sludge). KapStone also moves various materials in and out of processes to enable optimal operation and to minimize raw material usage. We recognize that there is a need for regulation to ensure proper waste management. However, we are concerned about the potential for the proposed regulations to be misinterpreted to encompass process materials such as those listed above that are part of the essence of our manufacturing process and are definitively not solid waste. Therefore, we respectfully submit the following comments.</p> <p>[Commenter: B-05]</p>	<p>not be subject to permitting. To confirm, KapStone should consult with the local health jurisdiction.</p>
<p>B-05-02</p> <p><u>WAC 173-350-021</u></p> <p>A key concern for KapStone is the lack of clarity in defining what constitutes a solid waste. Inherent to the concept of a material constituting a waste is whether it has been discarded, abandoned or disposed of. This concept is well stated in proposed WAC 173-350-021(2)(a). However, the introductory language to proposed WAC 173-350-021(2) states that a material is a solid waste if it meets <i>any</i> of the criteria in</p>	<p>B-05-02</p> <p>Ecology did not intend to rely only on the criteria that a material had been discarded, abandoned or disposed to determine what is a waste, so the subsequent points under WAC 173-350-021(2) must stand alone and not be sub items under WAC 173-350-021(2)(a).</p>

the proposed rule (i.e., 2(a) through 2(g)). This language deviates from the intent of RCW 70.95.030 in that it potentially expands the scope of what is considered solid waste. One could read (b) through (g) to all be subsets of (a) or examples of (a). In other words a material "that has been permanently placed in or on the land" (the language in (b)) has necessarily been disposed of, a material that has been "placed on the land for beneficial use" has necessarily been disposed of (the language in (c)), a material that has been collected through a solid waste collection program has necessarily been disposed of (the language in (d)), etc. Conversely, none of these materials have become wastes unless or until they have been discarded, abandoned or disposed of. Therefore, we request that proposed WAC 173-350-021(2) be revised to read:

(2) A material is a solid waste if it meets any of the criteria in (a) ~~through (g)~~ of this subsection:

(a) The material has been discarded, abandoned, or disposed of including, but not limited to the following activities:

~~(b)~~ The material has been permanently placed in or on land for the purpose of disposal;

~~(eii)~~ The material is a byproduct generated from the manufacturing or processing of a product, and is placed on the land for beneficial use;

<p>(eiiii) The material has been collected through residential or commercial solid waste or recyclable material collection;</p> <p>(eiv) The material has been received at a solid waste handling facility;</p> <p>(fy) The generator has paid for or will need to pay for removal or processing of the material for solid waste recycling, storage, incineration, or landfilling; or</p> <p>(gvi) The material has been stockpiled for recycling, reuse, or use after recycling, but no market is available and stockpiles provide vector attraction or harborage, or release pollutants into the environment in violation of other human health or environmental rules and regulations.</p> <p>[Commenter: B-05]</p>	
<p>B-05-03</p> <p>We recognize in making this comment that in the second response to comments document for the preliminary draft rules, Ecology stated:</p> <p>The definition of "wood waste" in WAC 173-350-100 has been amended to remove the term "hogged fuel" to acknowledge that this material by its nature is a commodity and not a solid waste. Note that producers may be solid waste handlers (recyclers), but the hogged fuel produced is a marketable product. This should address the issue of Table 240 as related to "wood waste". Proposed section 021 will help determine whether other materials still listed as "wood waste" or "wood derived fuel" are solid waste. If processed (recycled) to</p>	<p>B-05-03</p> <p>The rule specifies that wood waste includes material generated from the manufacture of wood products. Products with positive market value purchased by the mills are not wastes. Ecology edited the definition of "wood waste" to provide clarity. Ecology amended the rule to specifically say these are wastes when determined to be wastes under WAC 173-350-021.</p> <p>The commenter says: "Sawdust, chips, shavings, and bark, to name a few, are valuable commodities for which good money is paid. They are not routinely discarded, abandoned or disposed of..."</p> <p>Ecology agrees that the actual disposal of these materials has declined over the last two decades, and encourages legitimate marketing of recyclable and reusable materials. But that does not guarantee that something like sawdust or wood chips will not</p>

specifications and managed as a valuable commodity, process materials would not likely be viewed as solid waste.

We appreciate the clarification that hogged fuel is not a solid waste but request that this clarification be carried into the rule language itself. We also request that it be clarified in 173-350-100 that the distinction between "wood waste" and "hogged fuel" is that wood waste is biomass that is discarded, abandoned or disposed of. Sawdust, chips, shavings, and bark, to name a few, are valuable commodities for which good money is paid. They are not routinely discarded, abandoned or disposed of. If they are discarded, abandoned or disposed, we recognize the potential for them to be regulated as solid waste. However, if they are not discarded, abandoned or disposed of, there is no authority to regulate them as solid waste. In the second response to comments document for the preliminary draft rules, there is the following statement:

Question: Does Table 320-A include all mills and boilers using wood waste as fuel, since they are not exempted in the applicability section?

Response: We anticipate that wood waste recycled into hogged fuel will fall out of the rule under new section 021. Storage of wood waste prior to conversion into hog fuel is subject to the piles section.

We strongly recommend that Ecology revise this statement and clarify the rules accordingly. The response to the question indicates a misunderstanding about the nature of hog fuel and hog fuel markets. Hogging is simply a process to ensure that

be handled as a waste. In fact, the commenter further observes:

“...If they are discarded, abandoned or disposed, we recognize the potential for them to be regulated as solid waste.”

So in the end Ecology refers the commenter back to new section WAC 173-350-021 that was specifically developed to address these matters, and was developed with a great deal of input from stakeholders.

<p>the wood fuel is properly sized for a particular boiler. If wood fuel has been sold to a mill and is yet to be hogged, that is no indication that the wood fuel is a waste. To the contrary, this is a valuable product in commerce. If biomass has been discarded, abandoned or disposed of, and processing is necessary to return it to commodity status, then it might be appropriate to classify its storage as subject to solid waste permitting. However, where valuable fuel is delivered to a mill site and is awaiting hogging to properly size the fuel, there is no basis in law to subject that material to solid waste regulation. We request that the draft rules be revised to specifically clarify this fact.</p> <p>[Commenter: B-05]</p>	
<p>B-05-04</p> <p>We also request clarification in the rule itself that materials like PRR, which could be never discarded, abandoned or disposed of, and therefore not solid wastes. These are valuable fiber sources which are a component of purchased materials and a valuable source of heat input. If they are never discarded, abandoned or disposed of, they cannot be considered waste. We request that the draft rules be revised to specifically clarify that materials which are never discarded, abandoned or disposed of, are not solid wastes.</p> <p>Similarly, the contents of our lime kiln are removed when the unit is taken down for maintenance. That partially calcined material is never discarded, abandoned or disposed of, and is returned to the kiln to complete the calcination process as soon as maintenance is complete. We request that</p>	<p>B-05-04</p> <p>Ecology did not intend to rely only on the criteria that a material had been discarded, abandoned or disposed to determine what is a waste. The entire determination tool in WAC 173-350-021 should be used on a case-by-case basis to establish if a material ever becomes a solid waste, and if it ever has, at what point it is no longer a solid waste.</p>

<p>the draft rules be revised to specifically clarify that materials which are never discarded, abandoned or disposed of, are not solid wastes.</p> <p>Alternatively, we would appreciate clarification in response to our comments that materials such as those described above would not be considered solid wastes so long as they are used in the normal scope of our manufacturing process in the manner they have been used without issue for decades. RCW 70.95.030 defines the scope of Ecology's regulatory authority and that authority does not extend to regulating process materials and valuable fuels which are never discarded, abandoned or disposed of.</p> <p>[Commenter: B-05]</p>	
<p>B-05-05</p> <p><u>Wastewater Treatment Sludge</u></p> <p>We are concerned about the suggestion in the proposed rule language that wastewater treatment sludge which is being actively managed and returned to the process is a waste. In the second response to comment document for the preliminary draft rules, Ecology states the following:</p> <p>Pulp waste (wastewater treatment sludge) remains solid waste for purposes of this section. Table 240 remains appropriate for combustion units burning material that is not suitably processed, and for wastewater treatment sludge.</p> <p>We agree with this comment to the extent that pulp must be managed as a solid waste.</p>	<p>B-05-05</p> <p>Wastewater treatment sludge (other than biosolids regulated under Chapter 173-308 WAC) is a solid waste, preliminarily. If it can pass the test under WAC 173-350-021, then it is not be considered solid waste. Sludge generated and used on site as described by the commenter would fall out of regulation as a solid waste under WAC 173-350-021. That the same sludge, transported to another facility for use in a boiler could also fall out of regulation as a solid waste. Alternatively, the receiving facility could qualify for a permit exemption. There are other scenarios, however, where the sludge would remain a solid waste, such as when disposed in a landfill, or received at an actual solid waste incinerator.</p>

<p>However, it would be relatively rare for our wastewater treatment sludge to be managed as a waste. Wastewater treatment sludge is overwhelmingly fiber that is too short to be used in the pulp making process. However, this fiber is still good wood fiber that we have paid for and wish to put to good use. An inherent part of our process is to take that fiber and manage it akin to our hog fuel. Specifically, the fiber is returned to the process in the form of fuel for our hogged fuel boiler. Were we to decide to manage the sludge as waste, we recognize that it would be subject to solid waste regulation. However, there is no basis under the definition of “solid waste” found in RCW 70.95.030 to regulate that this useful material as a solid waste when it is being used within the process as described here. We appreciate that the proposed Table 240-A exempts wastewater treatment sludge generated from the manufacturing of wood pulp or paper, but the exemption presumes that actively managed sludge is a solid waste which is fundamentally inaccurate. We request that the rules be revised to clarify that wastewater treatment sludge generated from the manufacturing of wood pulp or paper that is actively managed within the process as a fuel is <u>not</u> solid waste.</p> <p>[Commenter: B-05]</p>	
<p>A-12-02</p> <p>Requiring that recyclable materials have “positive market value” is particularly worrisome and, we expect, will cause a cascade of negative consequences and grey areas. Determining market value is problematic and complex. Commodity markets change and will cause uncertainty</p>	<p>A-12-02</p> <p>Positive market value is a necessary standard to delineate those materials which have already been recycled into valuable products or commodities and those that have yet to be. Rather than increasing the likelihood that producers will contract with marginal markets, positive market value insures that materials retain oversight via the regulations until</p>

in the recycling industry as processors won't know what's regulating their business. Market value may urge processors to contract with less reputable recyclers with marginal markets, rather than with known recyclers who must charge to keep their proven end markets viable.

With a market value criteria, numerous materials in the recycling stream will be considered "solid waste" and will be subject to various solid waste handling regulations. Green waste and wood waste for example incur a charge to haul away which would seem to classify them as solid waste. Questions and concerns for the recycling industry include:

- Would a recyclables hauler and/or processor then need to acquire solid waste handling permits?
- Will processing facilities be un-permittable and have to move if reclassified as solid waste facilities?
- Does that recyclable material become subject to solid waste flow control regulations?
- Will the recyclable material count toward state recycling totals?

Public policy can incentivize programs that provide a public good but are not self-sustaining. This "positive market value" metric dis-incentivizes recycling and waste diversion programs. We urge you to consider a different approach that will support one of the goals of the authorizing

their value insures that they are unlikely to be disposed of.

When a material has a negative value, the generator has an economic incentive to pay the least money by sending the material to the least expensive option. That option may often be disposal instead of recycling, possibly illegal disposal. Until a material has positive value, it is at risk of being discarded.

The commenter may not realize that under Chapter 70.95 RCW *all* recyclable materials are a subset of solid waste until they have been transformed or remanufactured into new products. This is not new and does not change with the adopted rule. Recyclable materials – even those with positive market value - are solid wastes under the previous rule and remain solid wastes under the adopted rule until they have been recycled into products or commodities with positive market value. As to the commenter's questions:

- Under the previous regulation, recyclable material processors must have a solid waste handling permit or a conditional permit exemption. Transporters of recyclable materials must be registered with Ecology as such. That does not change under the adopted rule.
- Processing facilities are solid waste handling facilities under the previous regulation, so they would not have to be re-classified.
- Recyclable materials have special provisions for flow control and will continue to do so under as flow control regulates disposal, not material recovery, recycling, anaerobic digestion, or composting (which are all forms of solid waste handling).
- Recovered recyclable materials – which as stated are solid wastes - are counted towards the state recycling totals and will continue to be counted.

<p>statute: to develop stable and expanding markets for recyclable materials.</p> <p>[Commenter: A-12]</p>	
<p>A-12-03</p> <p>Issue #1: Proposed Revision to the Determination of Solid Waste May Disrupt the Recycling Industry with Permitting, Facility Siting, and Material Handling Impacts</p> <p>Under the proposed code revision, a material is considered a solid waste unless it meets multiple criteria including that it “has been recycled, or “is ready for reuse” and “has positive market value”. Potential impacts include:</p> <p>This may require processors of recyclable materials to be classified as solid waste handling facilities, rather than recycling facilities. If defined as “solid waste”, companies are required to have solid waste handling permits from local health authorities and may be unable to renew site permits for their current locations. This uncertainty will impact different material types as well as different material handling phases of the recycling industry.</p> <p>The “positive market value” criteria is dependent on a current valuation of a material within changing markets, so a recyclable material’s classification may change as commodity markets change. It may also encourage sending material to international markets that will pay, but may not provide the highest environmental benefit and may have marginal end markets for the processed product. SWD pays to</p>	<p>A-12-03</p> <p>Under Chapter 70.95 RCW, <i>all</i> recyclable materials are a subset of solid waste until they have been transformed or remanufactured into new products. This is not new and will not change under the adopted rule. Recyclable materials, even those with positive market value, are solid wastes under the previous rule and remain solid wastes under the adopted rule until they have been recycled into products or commodities with positive market value.</p> <p>Under the previous rule, both green waste and scrap wood are indeed solid wastes and continue to be recyclable materials, which are solid wastes, under the adopted rule.</p>

<p>have green waste and scrap wood hauled away. Does that make those materials “solid waste”?</p> <p>We recommend that this section be revised so that it still addresses the relevant regulatory goals but does not hamper other sectors of the recycling industry with uncertain cost, permitting, supplier, and end-market impacts.</p> <p>[Commenter: A-12]</p>	
<p>A-12-11</p> <p>WAC 173-350-021.2.g “The material has been stockpiled...”</p> <p>Is there a time-period somewhere else in the WAC that would apply to this? If not, a time period should be defined. Otherwise some jurisdictions might decide it applies after a stockpile has been in place for 48 hours and some might interpret it to mean 6 months.</p> <p>[Commenter: A-12]</p>	<p>A-12-11</p> <p>As this condition is tied to attracting or harboring vectors or releasing pollutants into the environment in violation of other human health or environmental rules and regulations, Ecology did not believe specifying a time period for stockpiles was necessary.</p>
<p>A-12-17</p> <p>WAC 173-350-021(2)(e) This is worded very loosely. It could be interpreted to include materials delivered to a solid waste handling facility for the purpose of operating the facility (e.g., fuel, equipment, supplies). Recommend restating for added clarity.</p> <p>[Commenter: A-12]</p>	<p>A-12-17</p> <p>In the adopted rule, Ecology modified language in WAC 173-350-021(2) to provide clarity. In the proposed rule, one of the criteria to qualify as a solid waste read, “The material has been received at a solid waste handling facility.” Ecology added to that requirement so that in the adopted rule it reads, “The material has been received at a solid waste handling facility for recycling, incineration, disposal, or beneficial use as those terms are defined in WAC 173-350-100.”</p>

<p>B-07-02</p> <p>Positive Market Value</p> <ul style="list-style-type: none"> • What is the definition of positive market value? Does this definition take into account the value of the market or the value of the product within the market? Does this include the negative value associated with disposal vs recycling? • Additionally, the description for positive market value given in section 173-350-021 3c does not address market fluctuations. How does this description impact material like scrap steel, where steel values can fluctuate greatly. Scrap companies will pay for the scrap steel at a certain price but if the price drops then the customer has to pay for disposal. Will those facilities need solid waste permits on a temp basis? • Recommend including a definition of positive market value specific to the goals of this rule in section 172-350-100 <ul style="list-style-type: none"> ○ Positive Market Value: Value of a material that incorporates the actual value, the value from removing the material from the waste stream, and other value gained or lost through material handling i.e. tipping fees. • The goal of this definition should be to support the recycling of material <p>[Commenter: B-07]</p>	<p>B-07-02</p> <p>Positive market value is a necessary standard to delineate those materials which have already been recycled into valuable products or commodities and those that have yet to be. Rather than increasing the likelihood that producers will contract with marginal markets, positive market value insures that materials retain oversight via the regulations until their value insures that they are unlikely to be disposed of.</p> <p>When a material has a negative value, the generator has an economical incentive to pay the least money by sending the material to the least expensive option. That option may often be disposal instead of recycling, possibly illegal disposal. Until a material has positive value, it is at risk of being discarded.</p> <p>The commenter may not realize that under state statute, Chapter 70.95 RCW, ALL recyclable materials are a subset of solid waste until they have been transformed or remanufactured into new products. This is not new, and has not changed under the adopted rule. Recyclable materials, even those with positive market value - are solid wastes under the previous rule and remain solid wastes under the adopted rule until they have been recycled into products or commodities with positive market value.</p>

<p>O-04-01</p> <p>The Northwest Pulp & Paper Association has reviewed sections of the proposed regulation and seeks with the comment offered below to confirm our understanding of the term "solid waste," and thus applicability of the entire Ch. 173-350 WAC. We ask that the Department of Ecology clarify in its response to our comments the agency's regulatory intent relating to our industrial practices for the use of wood derived fuels and wood wastes.</p> <p>The pulp and paper industry produces, processes, purchases, and manages a wide variety of materials that are then recycled, reused, sold or burned in industrial boilers or process heaters but are never discarded, abandoned, or disposed of and therefore not a waste. For this industry the most familiar types would be hog fuel, wastewater treatment sludge, biomass or bio-based solid fuels, and other named materials in EPA's Non-Hazardous Secondary Materials regulation that are explicitly not classified as "solid waste" (40 CFR 241).</p> <p>We recognize the wide definition of "solid waste" in RCW 70.95.030. Inherent to the concept of a material constituting a waste is whether it has been discarded, abandoned or disposed of in the first place. This concept is well stated in proposed WAC 173-350-021(2)(a). However, the introductory language to proposed WAC 173-350-021(2) states that a material is a solid waste if it meets <u>any</u> of the criteria in the proposed rule (i.e., (2)(a) through (2)(g)). This language deviates from the intent of RCW 70.95.030 in that it potentially expands the scope of what is considered solid waste.</p> <p>Section -021(3), then identifies the management practices that if followed will cause materials to "no longer (be) a solid waste" and, ostensibly,</p>	<p>O-04-01</p> <p>The commenter may have misread the draft rule. Both positive market value and being recycled or ready for reuse are attributes of materials which are NOT solid wastes. The comment implied the inverse.</p>
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<p>not subject to any of the WAC 173-350 provisions. Two comments come from this:</p> <p>1. It is unfortunate that materials that "have a positive market value," or that have "been recycled or is (are) ready for reuse," or that is being "stored and managed to preserve its value," are characterized as "solid waste." (RCW 70.95). NWPPA facilities do not consider materials with these qualities to be "wastes" and dislike the negative connotation that comes with the term. EPA has navigated around this term in various rule-makings and it would be good if the Washington legislature and Ecology could do the same.</p> <p>2. The phrases "positive market value" and "established markets" in that criterion is a bit nebulous, but if questions arise we suggest facilities can certainly work to gain an understanding and agreement with Ecology.</p> <p>[Commenter: O-04]</p>	
<p>A-07-01</p> <p>WAC 173-350-021 Determination of Solid Waste: Please keep all components within this section to ensure recyclable materials have positive market value, stored and managed to preserve its value, and stored in a manner that does not impact human health and the environment.</p> <p>[Commenter: A-07]</p>	<p>A-07-01</p> <p>The elements included in the comment are included in the adopted rule in WAC 173-350-021(3).</p>
<p>A-21-01</p> <p>Section 021 – Determination of Solid Waste Section Questions:</p> <ul style="list-style-type: none"> Ecology may want to review the implications of this section particularly the 	<p>A-21-01</p> <p>The fluctuations in commodity value are precisely why Ecology included “positive market value” in the rule. When a material has a negative value, there is a monetary motivator to move the material in the least costly way. This may not mean getting the material to markets, but instead could lead to illegal</p>

<p>requirement of a material needing to have a <u>positive market value</u> in light of the China National Sword international impacts. Some commonly recycled materials such as mixed waste paper may now actually have a negative value. The economic criteria of a material needing a positive market value should be amended with language that recognizes the periodic uncertainty of recycling end markets due to circumstances out of the control of the recycling industry even with best processing efforts to meet stringent contamination specifications.</p> <ul style="list-style-type: none"> • Mixed plastic bales may also have a negative value until further sorted by resin type and material which may only be accomplished by moving those materials to a Canadian company for the further sorting and processing. If the mixed plastic bales are a solid waste according to this section, then would this imply that only certificated haulers can transport those bales for further sorting and processing? <p>[Commenter: A-21]</p>	<p>disposal or speculative accumulation constituting disposal.</p> <p>All recyclable materials are solid waste under Chapter 70.95 RCW. Recyclable materials may be transported by a registered transporter of recyclable materials and are not restricted to the G certificate haulers.</p>
<p>A-16-01</p> <p>-021 (2)(g) This supports SHD in discussing stockpiled material.</p> <p>-021 (3) The entire section is helpful in giving a process for businesses to establish through criteria what is no longer solid waste. Our experience with the matrix, such as Table 220A for compost exemptions really helped businesses and regulators alike by having parameters for determining and defining what fits the criteria and/or what they need to do to fit the criteria.</p>	<p>A-16-01</p> <p>Comment noted.</p>

<p>-021 (3)(c) positive market value is a reasonable, common-sense indicator - It will help SHD determine follow up as the business should know its receiving vendors. "Established markets" may need more definition.</p> <p>-021 (3) (d) again is helpful for SHD, as a business should handle a product or commodity as valuable, protected, not left as a waste. This should help with waste piles.</p> <p>-100 "commodity". Creating a robust definition is very helpful.</p> <p>[Commenter: A-16]</p>	
<p>A-06-13</p> <p>Section -240 Energy recovery and incineration facilities</p> <p>Subsection (1)(b)(ii) – is landfill gas being recovered to generate power or converted to liquefied fuel exempt from solid waste permitting per Section -021(3), Determination of solid waste (i.e., meet the criteria of “no longer a solid waste”)?</p> <p>[Commenter: A-06]</p>	<p>A-06-13</p> <p>Landfill gas that has not yet been recovered (collected, scrubbed/processed, and possibly compressed) is still a waste material, but gas that has been recycled into a natural gas product or compressed fuel is no longer a waste.</p>
<p>B-04-06</p> <p><u>WAC 173-350-021 Financial Tests for Determination of Solid Waste</u></p> <p>Two financial tests are proposed for determining whether a material is a solid waste (-021(2)(f)) or is no longer a solid waste (-021(3)(c)):</p>	<p>B-04-06</p> <p>For addressing why a financial test, and specifically “positive market” value, is included in the criteria for determining whether a material is a solid waste or not, please see response to comment B-07-02 and comment A-12-02.</p> <p>In the adopted rule, Ecology made changes in WAC 173-350-021 to remove a logic loop in the use of the term "solid waste," as suggested by the commenter.</p>

<p>A material is a solid waste if:</p> <p>"(2)(f) The generator has paid for or will need to pay for removal or processing of the material for solid waste recycling, storage, incineration, or landfilling;"</p> <p>A material might no longer be a solid waste if:</p> <p>"(3)(c) The material has positive market value, as indicated by established markets for the material. Paying a person to remove or process the material for recycling, disposal, or incineration is not positive market value, nor is paying a discounted amount for removal or processing;"</p> <p>These proposed financial tests are unreliable and unnecessary, for the following reasons:</p> <ul style="list-style-type: none"> • Markets for secondary materials are subject to wide pricing variation over time. Recent concern over China’s ban on certain scrap materials illustrates that market values can change suddenly, in response to global events. Because of this price variation, a secondary material that has positive market value today may become a “solid waste” under the proposed rule if prices drop, but then return to non-“solid waste” status when the market recovers. When virgin material prices are high, business that are able to instead reutilize a secondary material may be willing to bear all the costs and even pay generators for the secondary materials, but when virgin material commodity prices are low, such businesses can go through periods when they agree to accept some secondary materials (such as plastics and newsprint) 	<p>The word “storage” was removed from WAC 173-350-021(2)(f), which in the adopted rule has been renumbered and is WAC 173-350-021(2)(e).</p> <p>Ecology disagrees that paying for transportation alone constitutes “paying for removal” of the material, if indeed you are paying for transportation only. Where the criteria comes into play is when the cost of disposal is internal to the cost of removal or is overtly added. With edits mentioned above, the criteria reads:</p> <p>“(e) The generator has paid for or will need to pay for removal or processing of the material for recycling, incineration, disposal, or beneficial use as those terms are defined in WAC 173-350-100;”</p> <p>Under the previous rule, all recyclable materials were solid wastes until remanufactured into new products. This did not stifle innovation as individuals and companies strove to find new ways to recycle materials even when established markets did not yet exist. Under the adopted rule, Ecology recognizes that some recyclable materials may be bought and sold as commodities, so despite not being yet transformed into new products, Ecology no longer recognizes them as solid waste. The adopted rule is therefore not capturing any materials that were not already solid waste, but is allowing some materials previously regulated as recyclable materials to no longer be regulated when they have positive value and established markets as commodities. As the previous rule did not stifle innovation, the more lenient adopted rule will not either.</p>
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only if the generator bears some or all of the costs of removal and/or processing.

- Some Washington businesses are committed to reducing or eliminating landfill disposal, and are willing to subsidize (pay) for legitimate reutilization of their secondary materials to meet company environmental stewardship goals. As exemplified by the “zero waste to landfill” movement, with today’s environmentally progressive focus on avoiding waste disposal, generators are willing to pay some or even all the costs to remove and/or process their secondary materials to avoid land-filling. In other words, environmentally progressive generators are self-internalizing the external social costs of disposing of such materials as waste. Instead of following their internal cost- benefit ratio indicating that landfilling or incineration is the low cost option, these generators choose to voluntarily minimize societal costs by subsidizing reutilization.

- As Washington manufacturers develop and incorporate new materials into their products, new secondary materials are also created. While the proposed R&D exemption provides a starting place for generators to determine whether techniques and technologies can be developed to reutilize these new secondary materials, there is a gap in the proposed rule between the narrowly-defined R&D process and the existence of an "established market." When a new recycling opportunity is developing, and the market for the secondary material is still thin, the generator might need to subsidize the reutilization of that material, but this does not mean that the material should be subject to regulation as solid waste. The "established market" test

discourages development of new markets, which may involve changes in "who pays what to whom" during the market development process. As the rule is proposed, new secondary materials must immediately have "positive market value" as indicated by an "established market," or be treated as solid waste by all who handle them.

- While the proposed financial tests are presumably intended as a surrogate to predict whether a secondary material will be dangerously stockpiled, or discarded or abandoned, those test are not mere indicia that a material might or might not be a solid waste, but are independent test that would classify a secondary material based on the financial tests alone without regard to other factors. The proposed rule already has performance-based stockpiling criteria at (2)(g), a discarded/abandoned criteria at (2)(a) and (3)(a), and a storage and management requirement at (3)(d). These performance tests, together with applicable provisions of Ecology's air pollution control and water pollution control regulations as well as the provisions of the Model Toxic Substance Control Act (MTCA) and the public health laws, provide fully adequate criteria, requirements and remedies to protect the environment without stifling innovation and stewardship.

- *[The comment included four footnotes: "The material has been stockpiled for recycling, reuse, or use after recycling, but no market is available and stockpiles provide vector attraction or harborage, or release pollutants into the environment in violation of other human health or environmental rules and*

regulations:” “The material has been discarded, abandoned, or disposed of;” “The material is no longer discarded or abandoned;” and “The material is stored and managed to preserve its value, and is stored in a manner that preserves little or no risk to human health and the environment.”]

WAC 173-350-021 Determination of solid waste -021(2)(f)

For the reasons above, Boeing believes that the financial test proposed at WAC 173-350-021(2)(f) is unreliable and unnecessary, and should be eliminated in the final rule in favor of performance-based criteria.

However, the test also suffers from a number of logical, technical and drafting problems that would need to be remedied if it is retained in any form.

“(2)(f) The generator has paid for or will need to pay for removal or processing of the material for ***solid waste recycling***, storage, ***incineration***, or ***landfilling***.” (emphasis added)

Including the term "solid waste" in a criteria for determining whether a material is a solid waste creates a circular reference and a logical absurdity. Further, the terms recycling, incineration, and landfilling already indicate that these activities are solid waste handling activities, without the modifier "solid waste." In fact, including the modifier “solid waste” before these terms implies that recycling, incineration or landfilling can involve something other than solid waste – a seemingly false implication given the definitions of these terms. "Solid waste" should be removed from the text of

(2)(f) as a matter of clear drafting. Even better would be deleting the entire phrase “for solid waste recycling, storage, incineration, or landfilling,” since the mere use of the terms “recycling,” “incineration” and “landfilling” strongly imply that the material is solid waste regardless of who pays for what.

The term "storage" is also problematic.

“(2)(f) The generator has paid for or will need to pay for removal or processing of the material for solid waste recycling, *storage*, incineration, or landfilling;” (emphasis added)

Literally read, if the generator “has paid for or will need to pay for removal ... of the material for ... storage,” then the material is a “solid waste.” Thus, for example, if a person pays to have Brinks armored car transport gold bars to a safe deposit box (“removal ... for ... storage”), the gold bars would thereby be rendered solid waste. In order to assure that paid removal (transportation) of goods to storage does not legally convert those goods to solid waste, the term storage, should be struck. It is notable that the term "storage" is not used in proposed subsection -021(3)(c) below, indicating that it is also unnecessary in -021(2)(f).

*[Comment included three footnotes:
"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling includes processing waste materials to produce tangible commodities.]* (emphasis added);

*"**Incineration**' means a process of reducing the volume of solid wastes operating under federal and state environmental laws and regulations by use of an enclosed device using controlled flame combustion." (emphasis added); and "**Landfill**' means a disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill." (emphasis added).]*

Finally, the "paid for or will need to pay for removal" test implies that the cost of transportation *alone* can render the material a "solid waste." Transportation for hire costs money, whether one is moving gold bars or moving trash, and the cost of transportation alone tells one nothing about the value of the material itself. In order to prevent paid transportation from placing a material in the solid waste category, the phrase "in excess of value received for the materials" must be inserted.

In sum, if the financial test of -021(2)(f) remains at all, which it should not for the reasons explained above regarding volatile and emerging markets for reutilizable materials, the section should be changed to read as follows:

“(2)(f) The generator has paid for or will need to pay for removal or processing of the material in excess of the value received for the material for solid waste recycling, storage, incineration, or landfilling;”

WAC 173-350-021 Determination that a material is no longer solid waste - 021(3)(c)

One of the proposed criteria for determining that a material is no longer a solid waste is:

“(3)(c) The material has positive market value, as indicated by established markets for the material. Paying a person to remove or process the material for recycling, disposal, or incineration is not positive market value, nor is paying a discounted amount for removal or processing.”

As with subsection (2)(f) above, Boeing believes that a financial test that relies on “positive market value” and “established markets” is unreliable and unnecessary, and should be eliminated in the final rule in favor of performance-based criteria. However, the test also suffers from logical, technical and drafting problems that would need to be remedied if it is retained in any form.

Again, as in subsection (2)(f), the "paying a person to remove" test implies that the cost of transportation alone can cause a material to remain in “solid waste” status. Transportation for hire costs money, and the cost of transportation tells one nothing about the value of the material itself. In order to prevent paid transportation from placing a material in the solid waste category, the phrase "in excess of value received for the materials" must be inserted.

Additionally, if paying for removal or processing retains a material in "solid waste" status, whether the payment is a full payment or a discounted payment makes no difference, so the final phrase regarding discounted payment should be removed.

<p>In sum, if the financial test of -021(3)(c) remains at all, which it should not for the reasons explained above regarding volatile and emerging markets for reutilizable materials, the section should be changed to read as follows:</p> <p>“(3)(c) The material has positive market value, as indicated by established markets for the material. Paying a person to remove or process the material, <u>in excess of the value received for the material for recycling, disposal, or incineration</u> is not positive market value, nor is paying a discounted amount for removal or processing.”</p> <p>[Commenter: B-04]</p>	
<p>B-04-07</p> <p><i>WAC 173-350-300 On-site waste generator storage, collection, and <u>transportation</u></i></p> <p>While there appears to be no dispute that a generator’s on-site storage, collection, and transportation are not subject to permitting, the proposed regulations fail to make this clear. Therefore, we request the following addition to WAC 173-350-300:</p> <p>“(1) Applicability. These standards apply to the temporary storage of solid waste in a container at a premises, business establishment, or industry and the collecting and transporting of the solid waste. <u>These activities are exempt from solid waste handling permitting.</u>”</p> <p>Further, to align this waste generator permit exemption with language in the draft rule section on Determination of Solid Waste,</p>	<p>B-04-07</p> <p>WAC 173-350-300, On-site storage, collection, and transportation standards, is a long-standing section of the rule that includes requirements for a generator’s own waste managed on site. There has been no confusion in the past regarding a permit not being required, and the section clearly lacks any reference to requiring a permit.</p> <p>It is important to remember that not all solid waste handling requires a permit. The rule is organized by identifying activities that are not subject to the rule in WAC 173-350-020, and then within individual waste handling sections identifying requirements and conditions for permit exemption. In this case, Ecology felt that stating the obvious might actually lead to confusion –as if it was a change from past practices; or might encourage people to inappropriately try to fit their solid waste handling activity within the section to avoid a permit requirement. Ecology decided that further clarification was not warranted at this time.</p>

<p>Boeing recommends the following addition to WAC 173-350-021(4):</p> <p>“(4) If a material does not meet all of the criteria of subsection (3) of this section, the person in possession of the material is considered to be handling solid waste and is required to obtain a permit from the jurisdiction health department, or meet the requirements of a conditional permit exemption under the applicable section(s) of this chapter, or manage the material in accordance with the provisions of section 200, Beneficial use permit exemptions, <u>or meet the requirements for on-site storage, collection and transportation of WAC 173-350-300.</u> In an action to enforce the requirements of this chapter, the generator or person in possession of the material <u>who does not have a permit or an exemption from permitting</u>, must demonstrate that the material is no longer a solid waste.”</p> <p>[Commenter: B-04]</p>	
<p>A-08-01</p> <p>The Utilities and Transportation Commission (commission) appreciates the opportunity to comment on the Department of Ecology’s (Department) proposal to amend its solid waste handling standards. The commission limits its comments to the new section, WAC 173-350-021 Determination of Solid Waste, and changes to section WAC 173-350-100 Definitions, which affect the commission’s ability to regulate solid waste haulers under its jurisdiction.</p> <p>The commission has specific concerns in the proposed wording in new subsection</p>	<p>A-08-01</p> <p>The commenter is correct in that recycling must take place before the material is no longer a solid waste. Unlike the UTCs definitions, Chapter 70.95 RCW stipulates that all recyclable materials are a subset of solid waste for the purposes of solid waste handling standards, so a waste material <i>must</i> be recycled or salvaged for reuse before it can no longer be a solid waste.</p>

<p>WAC 173-350-021(3) which establishes a new series of criteria for material not to be considered a solid waste.</p> <p>A. WAC 173-350-021(3) of the proposed rule requires the satisfaction of five criteria before collected material will be no longer considered a solid waste. Subsection (3)(b), reads “[Material will not be considered solid waste when it] <u>has been recycled, or is ready for reuse</u>, as defined in WAC 173-350-100.” WAC 173-350-100 does not define “recycled,” but because it is in the past tense, we must assume it is referring to material that has already been transformed or remanufactured into usable or marketable materials.</p> <p>1.Subsection (3)(b) is inconsistent with subsections (3)(a), (3)(c), (3)(d), and (3)(e) because a literal reading of (3)(b) would require the recycling process to be completed before material is no longer considered solid waste. For example, under subsection (3)(b) as currently written, a bundle of aluminum cans would still be solid waste. WAC-173-350-021(3)(b) should be changed to read [Material will not be considered solid waste when it] is recyclable material, as defined in WAC 173-350-100.</p> <p>[Commenter: A-08]</p>	
<p>A-08-02</p> <p>In addition to the above wording change, we request the separation requirement be returned to the rule. The Department’s prior draft rule included a requirement that recyclable material be separated from solid wastes in 173-350-021(3); the current</p>	<p>A-08-02</p> <p>In the adopted rule, Ecology added the criteria, “the material has been separated from solid waste” to WAC 173-350-021(3).</p>

<p>proposed rules eliminate that requirement. Separation of recyclable material from solid waste is a tangible indication of recycling, providing inspectors an objective measure to determine compliance or the legal status of the collected material. The separation requirement as originally drafted would be indispensable in the practical enforcement of solid waste collection rules and statute.</p> <p>[Commenter: A-08]</p>	
<p>A-08-03</p> <p>While subsections (3)(a), (3)(c), (3)(d), and (3)(e) set out largely observable requirements for the purpose of identifying material in the waste stream that is recyclable, (3)(b) fails to follow the intent of the rule and makes enforcement far more difficult. If the Department is unwilling to adopt the wording proposed in A.1. above or return the separation requirement as suggested in A.2. above, subsection (3) would benefit by the elimination of the proposed WAC 173-350-021(3)(b).</p> <p>[Commenter: A-08]</p>	<p>A-08-03</p> <p>WAC 173-350-021(3) does not attempt to identify recyclable materials, it identifies criteria that establish when a material is no longer a solid waste, and not subject to the regulation. It identifies products and commodities that have already been recycled or salvaged from the waste stream for reuse.</p> <p>Please see response to comment A-08-02.</p>
<p>A-08-04</p> <p>In addition, WAC 173-350-100 does not contain a definition for “separated” or “separation.” Earlier versions of this rule did include a definition of “separated.” “Source separation” is defined as “the separation of different kinds of solid waste at the place where the waste originates.” Providing a definition for “separated” or “separation” would alleviate confusion. The commission supports the definition proposed in comments submitted by the</p>	<p>A-08-04</p> <p>Please see response to comment O-14-04.</p>

<p>WRRRA, except recommends the 5 percent by weight criterion should be changed to 5 percent by volume allowing investigators the ability to estimate non-recyclable contamination without the use of a scale. For this reason, the commission proposes including the following definition in the chapter:</p> <p>“Separation” or “separated” means source separation into individual material streams to remove or separate recyclable materials from other non-recyclable solid waste, resulting in less than 5 percent by weight <u>volume</u> non-recyclable materials, for the purpose of reuse or recycling.</p> <p>[Commenter: A-08]</p>	
<p>O-12-02</p> <p>Definition of Commodity: We can support the definition of commodity as written. We ask the Dept. recognize this definition can <i>equally apply directly to our materials as they “meet widely recognized standards and specifications”</i>. We demonstrated this by revising the same definitions as they would apply to our products. From our comments of September 2018:</p> <p><i>These are assets to be managed rather than wastes to be regulated. We would ask Ecology to reconsider their approach as it based on old and no longer contemporary perspectives for recycling of these valuable construction materials.</i></p> <p><u>Similar to the steel slag exemption:</u></p> <ul style="list-style-type: none"> • <i>Recycled concrete, aggregate and asphalt constriction materials are a primary or secondary product of necessary construction</i> 	<p>O-12-02</p> <p>The steel slag exclusion comes directly from Chapter 70.95 RCW, and was not part of this rule revision. Concrete is most certainly often recycled through crushing to a specification into a commodity or finished product. It is also the most common material disposed of in inert waste landfills, so until it is recycled to a specification, and has positive market value, it remains a recyclable material, which is a subset of solid waste.</p>

<p><i>processes and production, produced to a specification, managed as an item of commercial value, and placed in commerce for general public, public works and private consumption, and if the construction materials are not abandoned or discarded or placed in a solid waste stream.</i></p> <p><u>"Commodity"</u></p> <ul style="list-style-type: none"> • <i>Means a material that meets widely recognized standards and specifications such as those in ASTM International, American Concrete Institute (ACI) WSDOT, FAA and FHWA, is described as a necessary and desirable outcome in the recycling and reuse of these materials by state and federal agencies such as EPA and FHWA, and are mutually compatible with other materials meeting the same specifications and has well established markets.</i> <p>These definitions as illustratively revised are fundamental to our recyclable concrete and aggregate products as we can quantify existing and specific industry specifications and standards for these materials. Once considered per above, our concrete and aggregate materials meet the same intent and considerations given to others to qualify their products for exemption with equal and positive value. Given these definitions can easily be modified to become essentially product neutral, we request the same acknowledgment and consideration be extended to concrete and aggregate products.</p> <p>[Commenter: O-12]</p>	
<p>O-12-04</p> <p><u>Section 021-: Determination of solid waste:</u></p> <p>In attending the public hearings, it is clear the agency is getting a significant amount of</p>	<p>O-12-04</p> <p>As all recyclable materials are a subset of solid waste under Chapter 70.95 RCW, and as recycling is, again by law, a solid waste handling activity, categorizing a material as a solid waste cannot hinder a material's ability to be recycled. The</p>

comments and push back on this section. We share the same concerns.

The agency has made some good progress in determining what a solid waste is or is not. However, specific triggers will likely and unnecessarily prevent responsible recycling and not meet the goals of Waste 2 Resources. This will only serve to restrict quality recycling and lead some to find alternative methods to dispose of materials outside of this rule. A very predictable consequence.

Our primary concern is 021 3(c). Previously, we have commented, in our industry it is the usual and customary past and existing practice for a generator to pay a fee to our production facilities. As our facilities are not disposal facilities, the fee is to help in offsetting costs for processing of the raw material into finished process materials. This improves the construction economics of recycling concrete and aggregate materials and provides an incentive for the material to be recycled versus landfilled. With the volumes of concrete and aggregate materials being returned it is necessary an avenue for effective and cost effective recycling be maintained.

Sept. 2017; As we commented earlier regarding section -021

These materials meet the criteria outlined in (2):

- *That is not abandoned or discarded,*
- *Is not placed on land for disposal,*
- *Is placed on land for beneficial use,*

inverse is true; a material cannot be recycled unless it *is* a solid waste. Once a material has been recycled into a product or commodity with positive market value, it can then leave the regulatory oversight of the solid waste handling regulations.

Positive market value is a necessary standard to delineate those materials which have already been recycled into valuable products or commodities and those that have yet to be. Rather than increasing the likelihood that producers will contract with marginal markets, positive market value insures that materials retain oversight via the regulations until their value insures that they are unlikely to be disposed of.

When a material has a negative value, the generator has an economical incentive to pay the least money by sending the material to the least expensive option. That option may often be disposal instead of recycling, possibly illegal disposal. Until a material has positive value, it is at risk of being discarded.

- *Is a material collected for the purposes of recycling (outside of the non related facilities listed),*
- *By standard practice, generators pay our facilities to accept the material for recycling for project economics*
- *Have markets readily available.*

In -021 (3)

- *These materials meet the criteria as outlined in (3) (a) – (f). Our “feedstock” or raw materials to make finished product do not differ from our finished product and are the same materials.*

The occurrence of a simple transaction taking place should NOT disqualify the positive value criteria that has been met. The same value determination for materials to not be considered a solid waste are in play regardless of whether or not a transaction has taken place. These same materials in our industry segment also meet the definition of commodity as described above, further validating the positive value of the material. *We would request the ability to link the value of a commodity as written and the positive value determination in 021 be used as a brightline to advance positive value versus being defined by a transaction for concrete and aggregate materials.*

As written, 021 undermines the economic and positive value test the agency has worked to accomplish. We operate in much larger volumes than general commercial recycling operations. Regardless if a transaction takes place, our materials remain the same and retain the same intrinsic positive value in either form.

The value of the material itself and not a transaction must be allowed to determine the “positive market value” of the material. The

agencies test pre-determines that a process, not the material itself as the determining criteria to be considered a solid waste. This is counter intuitive and can easily be reconciled.

We request the Department reconsider its position in Section 021 and make the changes necessary to reasonably and responsibly reduce waste material and increase recycling as state and federal laws and guidance require.

We recognize other industries prefer to preserve their existing practices and transactional history and this language may support them. However, If the language does not work for all stakeholders, the language should be reconsidered and an acceptable balance should be achieved. We request the department convene any necessary discussion between stakeholders.

In our comments to Al Salvi, September 2017;

To meet the intents and stated objectives of EPA, FHWA, WSDOT, Governor Executive Orders and the 2015 Legislature; these materials need to be properly considered for their intended purpose to advance recycling and help Ecology meet its stated Waste 2 Resources goal.

- The materials are not discarded or abandoned.
- The materials are generally unique sources of materials that have already have been approved for use and remain substantially in the same original form. Although as we mentioned, adding brick to these materials would include other common inert materials removed in the greater Seattle market and other areas. Our recycling facilities separate materials as necessary to meet specifications.

<ul style="list-style-type: none"> • The materials are clearly a valuable product and are clearly used as a valuable product in its intended application • These products have a strong economic value as it is specified for use and sold • Has significant value in its intended use as it can replace or is an effective substitute for an alternative product (virgin materials) that would have to be purchased or acquired • The generator and processor of the materials stores, handles, manages, transports these products as a valuable product rather than a waste, manages these materials according to environmental permit criteria to minimize and reduce environmental risk. • Storage of these materials is subject to many criteria that contribute to throughput and use. As recycling of these materials becomes more commonplace, consumption will return to the widely acceptable levels prior to 2008. Essentially, we couldn't make enough material and keep it in stock. Product and ease of use acceptance produces or exceeds a reasonable cycle of storage and use. <p>These are assets to be managed rather than wastes to be regulated. We would ask Ecology to reconsider their approach as it based on old and no longer contemporary perspectives for recycling of these valuable construction materials.</p> <p>[Commenter: O-12]</p>	
<p>O-13-02</p> <p>Early in the process, the group decided against altering the definition of solid waste, but attempted to draft a new WAC section to clarify what materials are NOT solid waste. The group</p>	<p>O-13-02</p> <p>In its response to the proposed rule, this commenter included legacy comments submitted during informal comment periods on earlier drafts of the rule. This comment predates the proposed rule and</p>

<p>developed several factors to apply to any given material to determine if it should not be classified as a solid waste. If a waste or material meets the factors of this test, it becomes exempt from any solid waste handling standards. This means a waste is no longer subject to solid waste regulation ranging from those designed to prevent release into the environment or to the reporting requirements from which Washington's recycling rate is determined. Beyond that, in all reality, this rule proposal overreaches and effectively changes the statutory definition of solid waste, a change that cannot and should not be accomplished through a rule.</p> <p>[Commenter: O-13]</p>	<p>reflects draft language not found in the adopted rule. Other remarks by this commenter are captured elsewhere in this document.</p> <p>Ecology believes that the changes in the rule reflect the best approach based on the four and half years of staff and stakeholder efforts.</p> <p>Please see response to comment O-15-06 and comment O-13-3.</p>
<p>O-13-03</p> <p>After consulting with county and other local government representatives, who were not included in the definitions work group, WRRRA believes the factors in the rule language are vague and over broad. The rule is "self-authorizing" and lacks any real oversight or clear direction on who applies the factors, be it the generator of the waste, the local health department, or DOE itself. Further, the rule's "self-authorizing" nature is bereft of oversight or enforcement, either by DOE or a local health department, neither of which are required to be notified under the draft rule. Moreover, the factors are so broad that the outcome of the test appears dependent upon the varying opinion or outcome sought by any individual applying the rule. Based on this, the rule is unlikely to be consistently applied and even less likely to be enforced. Early in the process, WRRRA suggested consulting with the Department's Assistant Attorney General on what authority the Department had to expand or modify the statutory definition in the rule process. While this request was found to not be timely, we still believe that your own attorneys will find that</p>	<p>O-13-03</p> <p>Ecology feels the determination of solid waste in WAC 173-350-021 narrows the spectrum of what is considered a waste and provides valuable guidance to generators, the jurisdictional health departments and Ecology staff.</p>

<p>the department lacks the ability to materially change the definition.</p> <p>[Commenter: O-13]</p>	
<p>O-14-02</p> <p>WRRRA believes that the "criteria" put forth in WAC 173-350-110 to assist in making the all-important determination, whether or not a material is solid waste, are well stated and should be of significant assistance to both regulators and industry. When taken on their own, without regard to key definitional changes which will be discussed later, the factors or "tests" are solid and most importantly, support the statutory definition of solid waste in RCW 70.95. The "tests" are similar to those in other states, California being one where they have been successfully applied. The proposal that material is solid waste if it meets "any" of the criteria would be particularly helpful as it would allow for the broad decision making parameters which are necessary here. Similarly, the requirement that in order to be no longer a solid waste, a material must meet "all" criteria is a common sense approach that, again, will be of substantial assistance to regulators. A definitive test with this level of specificity has long been needed.</p> <p>[Commenter: O-14]</p>	<p>O-14-02</p> <p>Comment noted. This comment refers to an earlier draft of the rule. WAC 173-350-110 was significantly modified became WAC 173-350-021 in the adopted rule.</p> <p>Please see response to comment O-07-02and comment O-14-1.</p>
<p>O-14-05</p> <p>An unknown level of widespread deregulation through definitional changes and application of the WAC 173-350-110 Determination of Solid Waste Test.</p> <p>As previously discussed, the determination of waste test in the proposed 173-350-110 develops a useful list of factors which support the statutory definition of solid waste in RCW</p>	<p>O-14-05</p> <p>The WRRRA is correct that some previously regulated facilities, primarily but not exclusively manufacturers purchasing commodities to make recycled products, will no longer be subject to the solid waste regulations through the revised definitions of "recycling" and "commodities." However, as these facilities are still subject to other environmental laws and regulations, such facilities</p>

70.95. WRRRA supports the factors and test in 173-350-110 standing alone. However, when read in conjunction with key definitional changes, the practical effect of the test goes far beyond its apparent purpose as a tool to provide consistency across jurisdictions and serves as the vehicle to deregulate a large swath of the solid waste and recycling industry in Washington which is not supported by the governing RCW 70.95.305.

One of the factors for material to escape classification in 173-350-110(3)(C) is that “The material has been recycled, or is ready for reuse.” The rule proposal substantially changes the definition of recycling to include materials processed into “commodities” which fall short of the fully remanufactured materials previously required by the rule, the new definition reads:

“Recycling” means transforming or remanufacturing waste materials into usable or marketable materials for use other than disposal or incineration. Recycling includes processing waste materials into tangible commodities. Recycling does not include crushing, shredding, compacting, sorting, baling, or repackaging when those activities are part of collection, intermediate processing, or preparation for the purpose of transport. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport.

The rule also defines commodity somewhat liberally in 173-350-100, as essentially any material which meets broad industry specifications, which “is mutually interchangeable with other materials meeting the same specifications, and that has well-established markets.”

Taken together, applying the WAC test in conjunction with these definitional changes will declassify a number of facilities as handling solid waste at all, not merely grant the facility an exemption under WAC 173-350-210 or 310,

are not without operating restrictions or regulatory oversight.

<p>but completely remove any number of facilities from regulation under 173-350 at all. Previously, recycling required the remanufacturing of waste into new products. Under the new rule, many previously regulated WAC 173-350-210 or 310 facilities will be deregulated. It is not clear nor likely that DOE has the authority to deregulate these solid waste facilities under 70.95.305, and to date, DOE has not provided stakeholders with a list of potentially effected entities for deregulation, despite several requests.</p> <p>With these changes, DOE is deregulating an unknown number of solid waste handling facilities. WRRRA cannot support these changes, especially without some idea with regards to the scope of these changes or the facilities affected. We also believe that DOE cannot hope to receive meaningful feedback on the rule without providing stakeholders some understanding of the scope of the deregulation proposed.</p> <p>Furthermore, deregulation of an unknown number of facilities may have an unintended and negative impact on Washington’s recycling rate. Deregulating these facilities also means many large recyclers will not be bound to the same mandatory reporting requirements found in the current WAC 173-350-210 & 310. Our understanding is that these deregulated facilities would only be sent a recycling survey, which is optional and lacks the specificity of the current reporting requirements. In the long run, this will surely have a detrimental effect on Washington’s recycling rate. Washington’s recycling rate is a number which WRRRA, the industry, and DOE should celebrate, not artificially deflate through deregulation.</p> <p>[Commenter: O-14]</p>	
O-15-03	O-15-03

<p>Second, the rule requires additional clarity with regards to the applicability section, WAC 173-350-020 and the determination of waste test in WAC 173-350 021. A number of the materials or situations described in WAC 173-350-021 could become solid waste or result in a solid waste handling activity depending on how the material is managed or where it is ultimately used or sent for disposal. Some examples, (2)(v) "Manufactured topsoil," (2)(s) "Collection, transport, and sale of used goods and materials solely for the purpose of reuse," and (2)(z) "Organic materials, used for animal feed or to create animal feed" appear to describe materials and practices that can result in solid waste handling if the materials somehow enter the waste stream. One of the more recent additions for steel slag accounts for this issue and states that 173-350 does not apply to steel slag as long as the "material is not abandoned, discarded, or placed in the solid waste stream." In WAC 173-350-020(2)(y) if manufactured topsoil is sent to a transfer station or landfill for disposal for any reason, then it is solid waste.</p> <p>[Commenter: O-15]</p>	<p>Please see response to comment O-05-03.</p>
<p>O-15-04</p> <p>The applicability section as a whole should adopt a similar approach for all categories and note that all materials could become a solid waste and be subject to the determination of waste test in WAC 173-350-021 depending on how they are managed or their final destination. A positive change in this section is moving WAC 173-350-021(2)(20) "drop boxes used solely for the collection of recyclable materials" to a more appropriate exemption in WAC 173-350-310, presumably for the very reason discussed above. Additional language should be added to WAC 173-350-020 to state that the materials listed therein, <i>and in fact any materials</i>, are capable of becoming solid waste</p>	<p>O-15-04</p> <p>Please see response to comment O-05-03.</p>

<p>depending on the manner in which they are handled.</p> <p>[Commenter: O-15]</p>	
<p>O-15-06</p> <p>Fourth, WRRRA is concerned with language in the Responsive Summary issued with the draft rule. On page 2, when discussing the determination of waste test, the response states that:</p> <p>"Many commenters expressed concerns on how the rule might be used by other entitles to interpret and seek enforcement. The concerns related to the implications of a material being labelled as solid waste or solid waste handling activity. The currently effective rule is more restrictive than the currently proposed rule."</p> <p>This response is surprising and not well explained. The new determination of waste test was intended as a tool to provide for better clarity and enforcement in solid waste. The test is also somewhat restrictive by design with its "any/all" dichotomy to qualify as a waste/escape solid waste regulation. We urge the Department provide clarity regarding this statement in any future drafts or other documents issued and note the intent of the test as a tool to promote regulation, enforcement, clarity, and uniformity.</p> <p>[Commenter: O-15]</p>	<p>O-15-06</p> <p>As stated by the commenter, the determination of solid waste in WAC 173-350-021 is a tool to promote consistent regulation, enforcement, clarity and uniformity.</p>
<p>O-16-01</p> <p>WAC 173-350-XXX Determination of Solid Waste (Definitions):</p> <p>WRRRA supports the statutory definition of solid waste. The draft definitions section presented to the work group in the 12-30-15 draft demonstrated a workable determination of</p>	<p>O-16-01</p> <p>Please see response to comment A-08-04 and comment O-14-04.</p>

<p>waste test which supported the statutory definition of solid waste.</p> <p>Like earlier drafts, the 12-30-15 draft uses the term "separated" in WAC but did not carry over this important definition from previous drafts. WRRRA recommends adopting the 2-25-15 definition of separation with one edit:</p> <p>"Separation" or "separated" means source-separation or other processing to substantially remove or separate recyclable materials from other non-recyclable solid waste, resulting in less than 10% by weight non-recyclable materials, for the purpose of reuse or recycling.</p> <p>This definition provides needed clarity, supports existing regulation, and should be incorporated into the more recent drafts as the term "separated" is ambiguous standing alone.</p> <p>The proposed language in this section only recently reached the precision necessary to prevent abuse by sham recyclers. Adding additional factors or exemptions on internal review will reopen the potential for abuse. In erring on the side of caution, and with respect to the statutory definition of solid waste, WRRRA supports the most recent publically available draft of this section because it supports the definition of solid waste in RCW 70.95.030(22).</p> <p>[Commenter: O-16]</p>	
<p>O-10-01</p> <p>[Oral testimony] My name is Rod Whittaker, associate counsel for the Washington Refuse and Recycling Association. WRRRA represents the private sector solid waste service providers who provide essential environmental services every day in virtually every community in the state. WRRRA will submit written comments in detail, but on behalf of executive director Lovaas and our membership, I want to take the</p>	<p>O-10-01</p> <p>In the adopted rule, in WAC 173-350-021(3), Ecology included the criteria “the material has been separated from solid waste,” to preserve this key concept.</p>

<p>opportunity to highlight two key issues that the final rule should address.</p> <p>First, I want to talk about the determination of waste test.</p> <p>The test, if successfully implemented, should make a useful tool for both regulators and the industry. Elements of the test that incorporate positive market value and markets are crucial and we strongly support their inclusion.</p> <p>However, the latest version of the test removes a key factor present in all previous versions. The missing factor stated that to no longer be considered a solid waste, a material must be separated from other solid wastes.</p> <p>Ultimately, the rule has to support the statute, and recycling in 70.95 begins with source separation. The concept of source separation is key to both the act of recycling, and the underlying statutory authority here.</p> <p>The legislature finds that source separation of waste must become a fundamental strategy of solid waste management, and ranks source separation second in its priorities for the management of solid waste in Washington in 70.95.010.</p> <p>We understand that the fact that materials must be separated from other wastes may be inherent in some of the other factors, but the concept of source separation is so crucial to recycling that it should remain in the test.</p> <p>[Commenter: O-10]</p>	
<p>O-05-02</p>	<p>O-05-02</p> <p>Ecology is glad the commenter sees the value of the determination of solid waste test and has developed</p>

WAC 173-350-021 Determination of Solid Waste.

The determination of waste test provides much needed clarity and support for the definition of solid waste in RCW 70.95. The factors of this test that deal with “positive market value” and incorporate other elements of similar value tests in Oregon and California, are particularly important and timely. If successfully implemented and applied, this section should provide clarity for both industry and regulators.

The latest iteration of the test deletes a factor present in virtually all earlier iterations of this test which stated that a material must be “separated from solid wastes” to no longer be a solid waste. This factor should be included in the final rule and the word “separation” should be defined. Source separation of recyclables is a key component of Washington law in RCW 81.77 and 70.95, and the concept of recycling itself. The final rule should contain a factor requiring materials to be separated from other wastes to not be considered a solid waste.

Separation should also be defined to clarify the degree to which a material needs to be separated from other solid wastes to no longer be considered a waste. WRRRA was heavily involved in the workgroup that developed this section, and earlier versions did define separation. This crucial definition and factor should be included in the final rule. WRRRA recommends adopting the earlier definition of “separation” with several edits to bring it into line with the new WAC 173-350-210 facilities sections:

an implementation plan as part of the rule adoption to educate stakeholders as recommended.

In the adopted rule, in WAC 173-350-021(3), Ecology included the criteria “the material has been separated from solid waste,” to preserve this key concept. As separation is a common term, and may be used in a variety of ways depending on context, (source-separation vs. separation of recyclable material streams at a material recovery facility) Ecology did not feel the need to define the term narrowly in these regulations. The definition proposed by the commenter would de facto force most curbside material recovery facilities to be classified as transfer stations, due to accepting both comingled material and handling material with double-digit contamination. Such a move is not in keeping with the intent of Chapter 70.95 RCW.

“Separation” or “separated” means source-separation into individual material streams to remove or separate recyclable materials from other non-recyclable solid waste, resulting in less than 5% by weight non-recyclable materials, for the purpose of reuse or recycling.

The definition above was heavily discussed and vetted by the stakeholder workgroup. This definition also supports and highlights the crucial statutory provision, source separation of recyclable materials.

Finally, the Department should develop a robust implementation and education plan alongside the formal rule proposal to ensure this test achieves the desired results. The determination of waste test, along with changes in the facilities, piles, and definitions section have the potential to improve the landscape of solid waste handling in Washington State. The Department will also need to play an active role in the implementation process to ensure localities understand and follow the intent of the new rules.

Determination of Waste Comments

Summary:

- Elements of test that incorporate “positive market value” and markets are crucial.
- Factor from previous rule versions which specifies “separation from other solid wastes,” should be included.
- Separation should be defined, specifying source-separation and the “5%

<p>rule” to align the definition with the facilities section updates.</p> <ul style="list-style-type: none"> • A robust implementation plan from the Department will be required for this and all other sections to achieve their goals. <p><i>[Comment included a footnote: RCW 70.95.010(5) “Source separation of waste must become a fundamental strategy of solid waste management. Collection and handling strategies should have, as an ultimate goal, the source separation of all materials with resource value or environmental hazard.”]</i></p> <p>[Commenter: O-05]</p>	
<p>B-16-01</p> <p>Waste Connections Inc (WCI) appreciates the opportunity to submit comments on WAC 173-350 Rule update. WCI has taken an active role in the process and has participated on several workgroups since the beginning of the Rule update process. This Rule update is important to us personally and professionally as we continue to make constant and never ending improvement on an already excellent solid waste handling system. With this in mind, we offer a few comments we hope you will take into consideration prior to making the Rule final.</p> <p>WAC 173-350-021 Determination of Solid Waste.</p> <p>a. WCI supports the clarification for determination of solid waste, this section should provide clarity for both industry and regulators. In particular the factors that deal with "positive</p>	<p>B-16-01</p> <p>Please see response to comment O-05-2.</p>

<p>market value" are particularly important in light of the current situation.</p> <p>b. In this latest draft of the determination, a test has been eliminated which stated that a material must be "separated from solid wastes" to no longer be a solid waste. Source separation of recyclables is a key component of Washington law in RCW 81.77 and 70.95, and the concept of recycling itself. The final rule should contain a factor requiring materials to be separated from other wastes to not be considered a solid waste.</p> <p>c. Separation should also be defined in 173-350 to clarify the degree to which a material needs to be separated from other solid wastes to no longer be considered a waste. "Separation" or "separated" means source-separation into individual material streams to remove or separate recyclable materials from other non-recyclable solid waste, resulting in less than 5% by weight non-recyclable materials, for the purpose of reuse or recycling. This definition was discussed at length in the workgroup.</p> <p>[Commenter: B-16]</p>	
<p>B-10-02</p> <p>WAC 173-350-021 DETERMINATION OF SOLID WASTE</p> <p>Comment 2: <u>Ecology has squandered an ideal opportunity to harmonize and simplify the definition of "solid waste."</u></p> <p>Although WAC 173-350-021 is a worthy attempt to define what is and is not a solid waste, it should have been simplified and made consistent with other Washington and federal interpretations of "solid waste". Instead, Ecology has crafted a definition of "solid waste" that is complicated and relies</p>	<p>B-10-02</p> <p>The determination of solid waste tool in WAC 173-350-021 has been generally well received, including by the other large solid waste companies who commented and the Washington Refuse and Recycling Association. Waste Management's comment, not approving of the final product, is noted.</p> <p>Ecology appreciate the numerous citations to case law. These become a part of the formal record and can perhaps support a different approach in the future.</p>

on various exceptions. Ecology could have simplified the definition of solid waste to be consistent with the numerous interpretations that Washington courts, hearings boards, Attorney General, agencies, and even Ecology have articulated over the past decades. See, e.g., *Littleton v. Whatcom County*, 121 Wn. App. 108, 116-117 (2004); *PT Air Watchers v. Dept. of Ecology*, No. 10-160 (Poll. Control Hearings Bd., May 10, 2011), *aff'd*, 179 Wn.2d 919 (2014); Department of Ecology's Reply Brief, *PT Air Watchers v. Dept. of Ecology*, No. 11-2-01270-8 (Thurston Cty. Super. Ct. Feb. 21, 2012); Department of Ecology's Response Brief, *PT Air Watchers v. Dept. of Ecology*, No. 11-2-01270-8 (Thurston Cty. Super. Ct. Jan. 5, 2012); *In re Determining the Proper Carrier Classification of Glacier Recycle, LLC*, No. TG-072226 (Wash. Util. & Trans. Comm. 2008); Dept. of Ecology, Technical Information Memorandum No. 93-1, "Recycling of Glass Cullet as Construction Material" (Nov. 9, 1993); Informal Opinion Letter from K. Gerla, Assistant Attorney General to Rep. P. Kremen (Oct. 31, 1994); Letter from Department of Ecology (Sep. 28, 1988), referenced in *In the Matter of the Petition For Correction of Assessment of No. 92-035*, Wash. Dept. of Revenue, Interpretation and Appeals Div., 12 Wash. Tax Dec. 85; 1992 Wash. Tax LEXIS 1468 (Feb. 20, 1992); *In re Petition for Correction of Assessment*, No. 06-0296, 26 Wash. Tax Dec. 188; 2006 Wash. Tax LEXIS 939 (Dept. of Revenue, Appeals Division 2006); *In re Petition for Correction of Assessment*, No. 98-133, 18 Wash. Tax Dec. 153, 1998 Wash. Tax LEXIS 881 (Dept. of Revenue, Appeals Division 1998); *In re Petition for Correction of Assessment*, No. 92-035, 12 Wash. Tax Dec. 85, 1992 Wash. Tax LEXIS 1468 (Dept. of Revenue,

<p>Appeals Division 1992); In re Petition for Prior Determination of Tax Liability, No. 89-435, 8 Wash. Tax Dec. 167, 1989 Wash. Tax LEXIS 1519 (Dept. of Revenue, Appeals Division 1989).</p> <p>[Commenter: B-10]</p>	
<p>B-10-03</p> <p>Comment 3: <u>WAC 173-350-021(2)(c) is inconsistent with the regulation and the definition of solid waste.</u></p> <p>This provision would define as solid waste a material that “is a by-product generated from the manufacturing or processing of a product, and is placed on the land for beneficial use.” Why? If material is used for a beneficial purpose, why is it considered a solid waste? If it is used for a beneficial purpose, then the material would have value and should not be considered a solid waste. Conversely, if a material is placed on land for other than beneficial purposes, it would not be considered a solid waste? It appears that this provision is misplaced and should be included in the subsection (3) that allows solid wastes to be no longer considered a solid waste if it is used for a beneficial purpose.</p> <p>[Commenter: B-10]</p>	<p>B-10-03</p> <p>The adopted rule contains modifications to the language in WAC 173-350-021(2) to clarify “beneficial use.”</p>
<p>B-10-04</p> <p>Comment 4: <u>The phrase “is separated from solid wastes” should be included in the solid waste determination criteria given in WAC 173-350-021(3).</u></p>	<p>B-10-04</p> <p>Please see response to comment O-05-2.</p>

<p>In prior versions of the draft rule and in the final work product of the Definitions and Determination of Solid Waste workgroups, one of the criteria to determine when a material is no longer a solid waste is that <i>the material has been separated from other solid wastes</i>. There was also a new definition created to define separated and separation:</p> <p>“Separation” or “separated” means source-separation or other processing to substantially remove or separate recyclable materials from other non-recyclable solid waste, resulting in less than 10% by weight non-recyclable materials, for the purpose of reuse or recycling.</p> <p>Separation from solid wastes is an important distinction to remove a material from regulatory oversight of Ecology and should be included in these criteria. Additionally, requiring separation from solid waste removes any ambiguity in how the material should be managed to no longer be considered solid waste for purposes of this rule. There is a simple solution to remedy the criteria language. WMW recommends adding the words “is separated from solid wastes” to criteria (d) to now state: (d) <i>the material is stored and managed to preserve its value, is separated from solid wastes, and is stored in a manner that presents little or no risk to human health and the environment</i> (emphasis added).</p> <p>[Commenter: B-10]</p>	
<p>B-10-05</p> <p>Comment 5: <u>WAC 173-350-021(3)(c) should be revised to include materials that are an</u></p>	<p>B-10-05</p> <p>When a material has a negative value, the generator has an economic incentive to pay the least money by sending the material to the least expensive option. That option may often be disposal instead of recycling, and possibly illegal disposal. Until a</p>

effective substitute for materials that would otherwise have to be purchased or acquired.

In some circumstances, the “positive market value” test may be too restrictive a test to determine whether a material is a “waste” or a valuable “commodity. This test should be broadened to include materials that have value to the user because it will be an effective substitute for an alternative product that would otherwise have to be purchased or acquired. This is the same test that EPA uses in its Final Rule on the “Definition of Solid Waste.” See 40 CFR 260.43(a)(2)(ii). EPA explained this requirement as:

This factor, one of the two core legitimacy factors, expresses the principle that the product or intermediate of the recycling process should be a material of value, either to a third party who buys it from the recycler, **or to the generator or recycler itself, who can use it as a substitute for another material that it would otherwise have to buy or obtain for its industrial process.** This factor is also an essential element of the concept of legitimate recycling because recycling cannot be occurring if the product or intermediate of the recycling process is not of use to anyone and, therefore, is not a real product.

EPA, Revisions to the Definition of Solid Waste Final Rule Compilations: The Legitimate Recycling Standard at 5 (June 2010).

Moreover, this revision would help to align Ecology’s solid waste regulations with its hazardous waste regulations, which state, in part:

(2) General categories of materials that are not solid waste when recycled.

(a) Except as provided in subsection (3) of this section, materials are not solid wastes

material has positive value, it is at risk of being discarded.

Positive market value is a necessary standard to delineate those materials that have already been recycled into valuable products or commodities, and those that have yet to be. Rather than increasing the likelihood that producers will contract with marginal markets, positive market value insures that oversight of materials will remain in place until their value makes them unlikely to be disposed of.

The commenter cites the state Dangerous Waste regulations in WAC 173-303-017(2). The Dangerous Waste Regulations differ vastly from the solid waste regulations and do not apply to non-dangerous waste. However, in the matter of use as a substitute for another material, a material that can be used or reused by the generator or sold to another user will likely never become a solid waste under WAC 173-350-021. If the material becomes a waste WAC 173-350-021, using that material as a substitute for a virgin material likely meets the definition of recycling and the facility should qualify for a permit exemption. In summary, Ecology does not believe the additional language would add value to the rule. Without further vetting, however, it might have unintended consequences.

when they can be shown to be recycled by being: ... (ii) **Used or reused as effective substitutes for commercial products**; WAC 173-303-017(2).

[Commenter: B-10]

<p>20. Surface Impoundments & Tanks</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>I-02-04</p> <p>The definition of “tank” has an incomplete sentence. Also, under the proposed definition, a surface impoundment is a tank. Some sort of wording that would help distinguish “tank” from “surface impoundment” would be useful.</p> <p>[Commenter: I-02]</p>	<p>I-02-04</p> <p>The comment reflects an unclear representation in the CR-102 text of the proposed change in the definition. In marking, the changed language in the proposed rule, the Code Revisers Office struck through the proposed deletion of text at the end of the adopted definition of "tank", as well as the text of the definition of "throughput", which is proposed to be deleted in its entirety, before inserting the end of the proposed definition of "tank".</p> <p>When viewed without underline and strikeout, the definition of tank is:</p> <p>"Tank" means a facility or part of a facility designed to contain an accumulation of liquids or sludges, and designed and constructed of materials with sufficient strength so that its walls can be self-supporting.</p>
<p>B-14-14</p> <p><u>WAC 173-350-330 Surface impoundments and tanks.</u></p> <p>(a) These standards are applicable to:</p> <p>(ii) Tanks with a capacity greater than one thousand gallons holding solid waste associated with solid waste handling facilities used to store or treat liquid or semisolid wastes or leachate associated with solid waste handling facilities; and</p>	<p>B-14-14</p> <p>There are a variety of pipe plug systems that might be used to isolate a gravity line by plugging the line ends and thus allow the interior of the pipe to be pressurized to check for tightness. Ecology chose not to specify a method to provide flexibility.</p>

<p>(iii) Piping systems within solid waste facilities that convey solid waste to or from surface impoundments and tanks as described in (i) or (ii) of this subsection.</p> <p>Comment: Ecology Response to Comments provided clarification to acceptable means of testing small tanks but did not address acceptable testing methods for gravity lines leading to small tanks. Please revise language regarding piping or provide additional guidance.</p> <p>[Commenter: B-14]</p>	
<p>B-14-15</p> <p>Inclosing, it is important for Ecology to not lose sight of the following as presented in the Preliminary Regulatory Analysis prepared for this rule making:</p> <p>Regulatory fairness act compliance:</p> <p>The RFA (19.85.030(2) RCW) states that:</p> <p>Based on the extent of disproportionate impact on small business identified in the statement prepared under RCW 19.85.040, the agency shall, where legal and feasible in meeting the stated objectives of the statutes upon which the rule is based, reduce the costs imposed by the rule on small businesses. The agency must consider, without limitation, each of the following methods of reducing the impact of the proposed rule on small businesses:</p> <p>a) Reducing, modifying, or eliminating substantive regulatory requirements;</p>	<p>B-14-15</p> <p>Ecology incorporates compliance requirements under the Regulatory Fairness Act in the regulatory analysis prepared for each rulemaking. Please see the final regulatory analysis for the adopted rule.</p>

<p>b) Simplifying, reducing, or eliminating recordkeeping and reporting</p> <p>[Commenter: B-14]</p>	
<p>A-12-16</p> <p>WAC 173-350-020(2)(q) Landfills regulated under 173-351 are clearly not subject to this chapter, but surface impoundments present at 173-351 landfills are subject to section 330 of this rule. That distinction isn't made clear up front in the applicability section, potentially resulting in a 351 landfill owner/operator mistakenly concluding that no portion of 173-350 applies to their landfill. Recommend clarifying that applicability up front.</p> <p>[Commenter: A-12]</p>	<p>A-12-16</p> <p>WAC 173-351-730 outlines the permit requirements for municipal solid waste landfills, and contains a cross-reference to WAC 173-350-330, Surface impoundments and tanks:</p> <p>(1) Applications for MSWLF permits and level of detail...</p> <p>(b) Specific requirements for permit applications. In addition to other requirements set forth in this section, complete applications for MSWLF permits must contain the following:...</p> <p>(viii) A permit or signed permit application satisfying the applicable requirements for MSWLF units with leachate collection systems:</p> <p>(A) Discharge under the Water Pollution Control Act, chapter <u>90.48</u> RCW;</p> <p>(B) Either a legal document (contract, local permit, a signed permit application etc.) certifying acceptance of leachate by the operator of a wastewater treatment facility for the discharge of leachate to that facility;</p> <p>(C) Surface impoundments or tanks under WAC 173-350-330; and</p>

	<p>(D) Other environmental permits applicable to managing leachate at the facility.</p> <p>Further, WAC 173-350-330(1) also discusses the applicability to municipal solid waste landfills permitted under chapter 173-351 WAC.</p>
<p>A-12-21</p> <p>WAC 173-350-330(1)(a)(i) See related comment in applicable section above, WAC 173-350-020(2)(q). (Surface impoundments, WAC 173-350-020(2)(q))</p> <p>[Commenter: A-12]</p>	<p>A-12-21</p> <p>Please see response to comment A-12-16.</p>
<p>21. Rulemaking Administrative Process</p>	<p>Go to Table of Contents</p> <p>Go to Commenters and Associated Topics</p> <p>Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>B-11-01</p> <p>CPM Development Corp. is submitting the following comments on the recent changes to the Solid Waste Rules. Overall, CPM views the majority of the changes in a positive light and is happy that Ecology took the time to work with stakeholders to reach the current rule.</p> <p>[Commenter: B-11]</p>	<p>B-11-01</p> <p>Ecology appreciates the time and effort taken by all stakeholders to help revise this rule and bring it back as a formal proposal and gave thoughtful consideration to all comments received.</p>
<p>B-05-06</p> <p><u>Compliance with SEPA</u></p>	<p>B-05-06</p> <p>Ecology disagrees that the rule represents a change that would create an impediment to the recycling of biomass. First, WAC 173-350-020 continues the</p>

<p>It is imperative that the final rules be clear that materials which are never discarded, abandoned or disposed of, are not solid wastes. The Washington legislature has clarified the importance of the continued use of biomass materials such as those discussed above to reducing greenhouse gas emissions and combating climate change. The proposed regulations appear to change the manner in which such materials are regulated and will create a barrier to the continued use of these materials. As such, the proposed rules will have a significant impact on Washington's efforts to combat climate change, a consideration that was not evaluated by Ecology in completing its SEPA checklist and issuance of a Determination of NonSignificance. If Ecology seeks to change the regulation of biomass materials in the proposed manner, then it is necessary to conduct a complete life cycle analysis of the greenhouse gas impacts of this rule, consistent with recent court opinions. We believe that the changes proposed above would resolve the need for a life cycle greenhouse gas assessment, but, in the absence of such changes we believe that the rulemaking cannot proceed until SEPA has been complied with.</p> <p>[Commenter: B-05]</p>	<p>longstanding exclusion from regulation for the materials identified below:</p> <p>(b) Wood waste used for ornamental, animal bedding, mulch and plant bedding, or road building purposes;</p> <p>(c) Wood waste directly resulting from the harvesting of timber left at the point of generation and subject to <u>regulated under</u> chapter 76.09 RCW, Forest practices;</p> <p>Secondly, new section WAC 173-350-021 recognizes materials meeting certain criteria as commodities. Wood waste and other materials that meet those criteria are not regulated as solid waste. WAC 173-350-320(2), regarding piles, also provides exemptions to permitting if specific criteria are met for handling wood waste that is determined to be solid waste.</p> <p>In short, the adopted rule is not more stringent than the previous version of the rule in this regard. Consequently, there can be no impact as described.</p>
<p>A-12-01</p> <p>The King County Solid Waste Division appreciates Ecology's ongoing work to update WAC 173.350 and also the chance to comment on proposed revisions. While we support the majority of revisions, we have grave concerns with the proposed changes to WAC 173-350-021, Determination of Solid Waste. We appreciate the need for broad regulations to protect public and environmental health, but believe that this section will prove highly</p>	<p>A-12-01</p> <p>Ecology understands that some will support the approach under the adopted rule, and others like King County may not. Solid waste management has evolved greatly since current statutes and regulations were put in place, and Ecology heard an argument to let commodities and products be managed as such, and to relieve managers of those materials from the burden of solid waste regulation. Ecology had some concern for the idea of separating commodities from waste. For that reason Ecology</p>

<p>disruptive to the solid waste and recycling industries. It raises more questions than it answers, it should not be enacted now, and we should instead continue developing tools to address this valid regulatory need.</p> <p>[Commenter: A-12]</p>	<p>created criteria for determining when a material should be managed as a commodity, or remain a solid waste. For example, stakeholders argued that the criteria for positive market value was too high of a bar. Ecology believes positive market value is essential to avoiding the speculative accumulation of wastes, and retained that criteria in the adopted rule.</p>
<p>A-10-01</p> <p>We submit our comments for the proposed revisions of the Chapter 173-350 WAC regulation (proposed regulation) addressing solid waste in the State of Washington. The Port of Tacoma (Port) integrates the values of environmental stewardship, sustainable practices, and operational efficiency into all aspects of our organization. We reviewed the proposed regulation draft closely with these values in mind, and offer comments regarding the sections that potentially apply to temporary stockpiles of pavement rubble, contaminated soil, and contaminated dredged material used in development activities. We understand that at the CR- 102 rule proposal phase, formal comments are needed to consider clarification to the rule. Accordingly, the Port offers comments on proposed revisions that we believe merit clarification, and comments on topics where the Port understood changes were planned that were not included in the proposed regulation.</p> <p>[Commenter: A-10]</p>	<p>A-10-01</p> <p>During the rulemaking process Ecology attempted to reach out to stakeholders and communicate on issues and potential changes. Ecology gave thoughtful consideration to all comments received, including those that may not have resulted in changes prior to proposing the rule.</p> <p>Please see response to comment A-10-02and comment A-10-3.B-102</p>
<p>O-02-22</p> <p>173-350-320 Preliminary Regulatory Analysis, page 24 and 31</p> <p>In the preliminary regulatory analysis estimates the costs of piles facilities that will be required to <u>keep records</u>, <u>submit</u></p>	<p>O-02-22</p> <p>Ecology reviewed the regulatory analysis and revised the time estimate for reporting and record keeping to four hours in both the costs and benefits sections.</p>

<p><u>notifications</u> and <u>annual reporting</u> to be 1 hour of owner/operator time per facility (page 24, underline added). Whereas the benefits of the proposed rule that would allow some piles facilities to avoid costs of <u>annual reporting</u> were estimated as 4 hours of owner/operator time per facility (page 31).</p> <p>Ecology should review the cost benefit analysis to ensure that identical activities are estimated at the same number of units of time in the cost and benefit sections. Ecology should also consider industry interviews to ensure that 1 hour of owner/operator time is an accurate estimate for record keeping, submitting notifications and annual reporting for a typical piles facility. Costs should include tracking, database management and annual reporting.</p> <p>[Commenter: O-02]</p>	
<p>O-02-07</p> <p>Proposed Rule Section: 173-350-100, Contaminated Soil</p> <p>With reference to SEPA Environmental Checklist, WAC 173-340, Preliminary Regulatory Analysis</p> <p>The content of the proposed rule and the explanation provided by Ecology in the Preliminary Regulatory analysis represent a change in the scope of materials that are currently regulated, <u>not a clarification</u>. Ecology must fully consider the impact of regulating these materials Within the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination</p>	<p>O-02-07</p> <p>Please see response to comment A-05-08.</p>

<p>System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.</p> <p>[Commenter: O-02]</p>	
<p>O-02-10</p> <p>173-350-020 and 173- 350-100, Engineered Soil</p> <p>The impact of this change may be significant if it changes the way materials from the demolition of the Alaskan Way Viaduct is handled based on the more restrictive pH standard in the proposed rule. This impact should be evaluated in the SEPA documentation as well as Preliminary Regulatory Analysis for demolition of all concrete based transportation infrastructure.</p> <p>[Commenter: O-02]</p>	<p>O-02-10</p> <p>Please see response to comment A-05-11.</p>
<p>O-02-13</p> <p>173-350-100, Release</p> <p>The proposed rule creates a change in scope of materials regulated by including a definition of "Release" that is far more restrictive than the definition of a release established under MTCA. Under MTCA: ""Release" means any intentional or unintentional entry of any <u>hazardous substance</u> into the environment, including but not limited to the abandonment or disposal of containers of <u>hazardous</u></p>	<p>O-02-13</p> <p>Please see response to comment A-05-14, comment A-05-06, and comment A-05-08.</p>

<p><u>substances</u> (underline added). Under the proposed rule substances "Release" is a new definition and means: "any intentional or unintentional entry of a <u>contaminant</u> into the environment at more than de minimis amounts and includes, but is not limited to, spilling, leaking, pouring, emitting, emptying, discharging, adding, applying, amending, injecting, pumping, escaping, leaching, dumping, or disposing of any <u>contaminant</u>" (underline added).</p> <p>The content of the proposed rule represent a change in the scope of materials that are currently regulated, <u>not a clarification</u>. Ecology must fully consider the impact of regulating these materials within the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.</p> <p><i>[Comment included a footnote: WAC 173-340-200]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-15</p> <p>173-350-100, Contaminated Soil, petroleum contaminated soils, release and street waste</p> <p>The Forum has also determined that under the proposed rule testing would likely be required because only test-driven parameters are provided in the proposed</p>	<p>O-02-15</p> <p>The intent of the regulation is to prevent the creation of cleanup sites by inappropriately moving contaminated material from one location to another. The rule does not require testing, but does require the judgement of the responsible party as to whether testing is merited based on knowledge of the site and the material being managed. Ecology has committed to developing guidance that will assist</p>

<p>rule for soils where a release has occurred. This would result in significant costs for many materials that would not meet requirements for contaminated soil under existing standards or the proposed rule.</p> <p>Ecology should include the impacts of all testing associated with the proposed rule in the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.</p> <p>[Commenter: O-02]</p>	<p>stakeholders in implementation of these requirements.</p> <p>As regards assessing the impacts of testing, persons managing soils should already be testing as necessary to prevent the improper handling of contaminated soils. To the extent that the requirement for testing of some soils reduces the potential for environmental impact, the change in the rule does not represent any increase in the risk or likelihood of a significant environmental impact, which is the threshold evaluated under the State Environmental Policy Act. Changes to the solid waste handling rules in this regard do not alter or require changes in related NPDES permits.</p> <p>Please see response to comment A-05-03.</p>
<p>O-02-23</p> <p>173-350-320 Preliminary Regulatory Analysis, page 24</p> <p>The cost benefit analysis for Piles used for storage or treatment mentions new costs associated with notifications and annual reports rather than the full cost of permitting when recycling wastes. This is based on the assumption that these facilities have a sand and gravel permit or construction stormwater permit. There will be some facilities however that store brick, cured concrete or asphaltic materials in quantities greater than 250 cubic yards that don't have one of these permits and these facilities will have to obtain one to be in compliance with the new rule. They may also have to track costs, manage data and prepare annual reports if they are recycling the materials.</p>	<p>O-02-23</p> <p>The premise of this comment is incorrect. Under the previous version of the rule, facilities that store more than 250 cubic yards of brick, concrete, or asphaltic materials are exempt from permitting if fifty percent of material is moved in one year, and all of the material in three years. The standard resulted in an operational shell game, and as a measure of compliance, Ecology and local health departments found this criterion nearly impossible to enforce.</p> <p>The adopted rule <i>raises</i> the threshold for permitting to 2,000 cubic yards, and allows facilities with between 250 and 2,000 cubic yards to maintain an exemption if they can show by documentation that they have met a revised standard for the amount of material retained on site. In that case, the presence of an NPDES permit is irrelevant. Under the proposed rule, facilities with more than 2,000 cubic</p>

<p>An evaluation should be made how many facilities will need to obtain one of the required permits and the data management costs associated with tracking and annual reporting for the cost benefit analysis to be accurate and complete.</p> <p>[Commenter: O-02]</p>	<p>yards can be exempt from solid waste permitting if they operate under an applicable NPDES permit.</p> <p>Lastly, the commenter engages in conjecture here, by speculating that there will be some facilities that will have to obtain a permit. Just as easily, there will be some facilities who can or will qualify for the new exemption above the permit threshold in the previous rule.</p>
<p>O-02-24</p> <p>173-350 Preliminary Regulatory Analysis</p> <p>Ecology is required under the Administrative Procedures Act to "determine that the probable benefits of the rule are greater than probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented." Some Road Maintenance Agencies have provided significant information on the probable costs of the initial draft, preliminary draft and the proposed rule during comment periods to Ecology. Ecology must fulfill its obligation under the Administrative Procedures Act and include these costs in the preliminary regulatory analysis.</p> <p>[Commenter: O-02]</p>	<p>O-02-24</p> <p>Ecology acknowledges the submissions of Snohomish County Public Works, as well as the Regional Road Maintenance Forum.</p> <p>The adopted rule does not require sampling or analysis, but does make clear that the creation of sites qualifying as contaminated under the state Model Toxics Control Act and related regulations should be avoided. Ecology hopes that all persons subject to the adopted rule agree with that position.</p> <p>To the extent that the quality of an excavated soil may be in question, managing agencies should already be taking diligent measures to determine the nature of, and appropriate disposition of materials off site. Ecology acknowledges that the revised rule provides clarity on a longstanding issue under solid waste rules, and believes the adopted rule aligns with the existing standards of the Model Toxics Control Act. Therefore, the adopted rule does not impose any additional obligations in this respect.</p>
<p>O-02-25</p> <p>173-350 Preliminary Regulatory Analysis</p> <p>Ecology is required under the Administrative Procedures Act to "determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and</p>	<p>O-02-25</p> <p>Please see response to comment A-05-25.</p>

<p>quantitative benefits and costs and the specific directives of the statute being implemented." Ecology should include further detail in the Preliminary Regulatory analysis of how this proposed rule would help implement RCW 70.95, which specifically requires the department of transportation and certain government entities to reuse construction aggregate and recycled concrete (effective 1 January 2016).</p> <p><i>[Comment included two footnotes: RCW 34.05.328(d); and RCW 70.95.805 paraphrased]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-26</p> <p>The Forum would like to provide several suggestions that would reduce the overall costs and impacts associated with the proposed rule while retaining a more protective standard than the current Solid Waste Handling Standards. Acceptance of these suggestions would reduce but not eliminate the costs and impacts to agencies that manage transportation infrastructure. Costs and impacts of the proposed rule to agencies that manage transportation infrastructure should be included in the SEPA documentation and the preliminary regulatory analysis.</p> <p>[Commenter: O-02]</p>	<p>O-02-26</p> <p>Ecology considered all comments received, including those that might have reduced costs and other impacts associated with the proposed rule.</p> <p>The purpose of review under the State Environmental Policy Act is to determine whether there is the likelihood of a significant adverse environmental impact. Ecology determined that there was not a likelihood of significant adverse environmental impact. SEPA is not an appropriate mechanism for economic analysis.</p>
<p>O-02-27</p> <p>These suggestions should also not be viewed to eliminate concerns expressed in Table 1; especially with regard to the scope</p>	<p>O-02-27</p> <p>The Assistant Attorney General's office has advised the agency that there is authority under Chapter 70.95 RCW, Solid waste management - Reduction</p>

<p>of the Department of Ecology's authority to enact the proposed rule under RCW 70.95. The Forum feels that regardless of the acceptance or rejection of the suggestions below that the Department of Ecology should seek an opinion from the Attorney General to ensure that Ecology is within its scope of authority to regulate soils in this way under RCW 70.95.</p> <p>[Commenter: O-02]</p>	<p>and recycling, for Ecology to set standards for management of soil containing contaminants.</p> <p>Please see the response to comment A-05-01 and comment A-05-04.</p>
<p>A-11-07</p> <p>Ecology has not met requirements under the Administrative Procedures Act. Ecology is required to determine that the probable benefits of the rule are greater than its probable costs. However Ecology has not included costs to agencies that manage transportation infrastructure or the municipal separate storm sewer system in the preliminary Regulatory Analysis or State Environmental policy Act documentation.</p> <p><i>[Comment included a footnote: RCW 34.05.328(d)]</i></p> <p>[Commenter: A-11]</p>	<p>A-11-07</p> <p>Please see responses to comment A-05-01 and comment A-05-08.</p>
<p>A-11-01</p> <p>Snohomish County (County) appreciates the opportunity to comment on the 173-350 WAC— Solid Waste Handling Standards proposed rule (proposed rule). The County supports the purpose of the Washington State Department of Ecology (Ecology) in this rulemaking process to establish a comprehensive statewide program for solid waste handling, and solid waste recovery and/or recycling which will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of this state. At this time</p>	<p>A-11-01</p> <p>Please see response to comment A-05-01.</p>

<p>the County has concluded that the proposed rule falls short of providing sufficient clarity to the regulated community; and impacts of the proposed rule are not analyzed in the preliminary Regulatory Analysis or State Environmental policy Act (SEPA) documentation. The County respectfully requests:</p> <ul style="list-style-type: none"> • Ecology provide clarity to the proposed rule and undergo an additional round of public review and comment, and • Ecology consider the impacts of the proposed rule on agencies that manage transportation infrastructure and municipal separate storm sewer systems. Ecology should consider the impact of regulating materials that are not currently regulated under the Solid Waste Handling Standards or as a hazardous substance under the Model Toxics Control Act - Cleanup. <p>[Commenter: A-11]</p>	
<p>A-11-06</p> <p>The proposed rule would increase costs for maintenance of the road network and Municipal Separate Storm Sewer System. In general, street wastes would change from being considered a clean soil under the current regulation to a contaminated soil under the proposed rule. The proposed rule would also require a significant increase in soil testing and changes to the reuse market (see comments 2-4). It is anticipated that the proposed rule would result in increased costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal. It is also anticipated that costs would be associated with testing and handling materials</p>	<p>A-11-06</p> <p>Ecology hopes that the county and other agencies in charge of transportation infrastructure have always been diligent in assessing the quality of the materials they remove from, or deliver to their roadways and projects. The effect of the rule is simply to confirm a standard of diligence that should already be in place. Street wastes including sweepings and ditch cleanings are not, and have never been considered "clean soil" under state solid waste regulations. The state has frequently been asked for clear direction but has struggled with how to define the threshold of contamination for these materials. Ecology settled on the standards of the Model Toxics Control Act. If a soil can be moved and placed so as not to create a site that would create a cleanup site under MTCA, it is not considered a solid waste under the rule.</p>

<p>that would not meet proposed standards for contaminated soils.</p> <p>[Commenter: A-11]</p>	
<p>A-11-05</p> <p>It is unclear how the proposed rule would be implemented. The proposed rule would require soil testing levels to be set through a MTCA scoping process. Soil testing levels would be used to determine if excavated materials are "clean" versus "contaminated." However all scoping processes under MTCA require a terrestrial ecological evaluation for contaminated soil. Therefore the regulated community would first have to determine if a soil is clean or contaminated before performing the scoping process for the end disposal site.</p> <p>[Commenter: A-11]</p>	<p>A-11-05</p> <p>The commenter is correct about having to determine if a soil is clean or if it has been impacted by a release of a contaminant. A person with soils that have been impacted by release of a contaminant should already be assessing those soils to determine how they can be safely managed. Most industries base this on MTCA cleanup levels, and for soils issues that have come up over the years, despite the lack of regulatory clarity in solid waste rule, health departments have based end use on MTCA. The proposed change is similar to existing industry standard and in agency response to complaints about soil management.</p> <p>“Clean soil,” as defined, includes soil not impacted by release of a contaminant. Ecology revised the definition of “clean soil” to clarify that soils in their natural background condition are clean soil given that no release of a contaminant has occurred. Ecology also revised the definition of “clean soil” to include examples of potentially clean soils. It includes soils from undeveloped lands not impacted by releases from industrial or historic activities, and similar soils over which development may have occurred, but land use is unlikely to have led to a release, such as use for residential housing, or over which development provided protection from releases, such as coverage by pavement.</p> <p>Please see response to comment A-05-02 and comment A-05-05.</p>
<p>A-15-02</p> <p>[Oral Testimony]. The second thing I would ask is that Ecology include impacts to local governments and business in its cost-benefit</p>	<p>A-15-02</p> <p>Please see response to comment A-05-09 and comment O-02-24.</p>

analysis. Right now I think that it's very limited in its consideration of those impacts. In fact it says that there are no impacts related to the changes in definitions. And it's clear that the contaminated soils definition is a change. I will point out that the Department of Ecology's current guidance in the stormwater manual, Appendix IV-G Recommendation for Management of Street Wastes does say there are no specific references for reuse and disposal options of street wastes in the Solid Waste Handling Standards *[but] because they do not apply to clean soils.

I think that the response to comments today clearly demonstrates that there is a change in the way that these materials will be regulated, and not just street waste, any materials that would be subject to routine vehicle operations if that is the bar by which a release is going to be [unintelligible]. So there will be significant costs associated with this proposed rule, including permits, staff time to determine what to do with these materials, structural improvements, testing, record keeping, staff and equipment to manage soils, and the cost of contaminated soils disposal, as well as considerations of what material, vendors that currently recycle materials, how they would undertake these regulations related to soils when the end site of a soil is unknown.. I will say that both the definition of clean and contaminated soils is subject to a release, then there's a MTCA standard under part A of both clean and contaminated soils. So the end site does need to be known even to determine if it is a clean or contaminated soil under the proposed rule. And that's my interpretation of it. So I thank you for considering those comments. Thank you.

**Speaker requested change to "because" from "but".*

[Commenter: A-15]

<p>A-15-01</p> <p>[Oral Testimony]. Hi, yes. Natalie Seitz, Snohomish County. I'd like to thank Ecology for the opportunity to comment both today, but also for the initial and the preliminary draft of this rule. Essentially, I would ask for two things.</p> <p>One that the Department of Ecology provides clarity for the proposed rule and recirculate it for another round of comments, prior to adoption.</p> <p>[Commenter: A-15]</p>	<p>A-15-01</p> <p>Please see response to comment A-05-01.</p>
<p>A-05-26</p> <p>The County would like to provide several suggestions that would reduce the overall costs and impacts associated with the proposed rule while retaining a more protective standard than the current Solid Waste Handling Standards. Acceptance of these suggestions would reduce but not eliminate the costs and impacts to agencies that manage transportation infrastructure. Costs and impacts of the proposed rule to agencies that manage transportation infrastructure must be included in the SEPA documentation and the Preliminary Regulatory Analysis.</p> <p>[Commenter: A-05]</p>	<p>A-05-26</p> <p>The State Environmental Policy Act, and documents prepared there-under, are not an appropriate vehicle for economic analysis. Ecology believes it has qualified and quantified economic impacts to the extent practicable. The agency is always interested in approaches that accomplish statutory objectives at less cost.</p> <p>Please see the response to comment A-05-01.</p>
<p>A-05-27</p> <p>These suggestions should also not be viewed to eliminate concerns expressed in Table 1; especially with regard to the scope of the Department of Ecology's authority to enact the proposed rule under RCW 70.95. The County feels that regardless of the acceptance or rejection of the suggestions below that the Department of Ecology fully consider the comments in Table 1 and seek an opinion from</p>	<p>A-05-27</p> <p>The Assistant Attorney General's office has advised the agency that there is authority under Chapter 70.95 RCW, Solid waste management - Reduction and recycling, for Ecology to set standards for management of soil containing contaminants.</p>

<p>the Attorney General to ensure that Ecology is within its scope of authority to regulate soils in this way under RCW 70.95.</p> <p>[Commenter: A-05]</p>	<p>Please see the response to comment A-05-01 and comment A-05-04.</p>
<p>A-05-23</p> <p>173-350-320</p> <p>Preliminary Regulatory Analysis, page 24 and 31</p> <p>The preliminary regulatory analysis estimates the costs of piles facilities that will be required to <u>keep records</u>, <u>submit notifications</u>, and <u>annual reporting</u> to be 1 hour of owner/operator time per facility (page 24, underline added). Whereas the benefits of the proposed rule, that would allow some piles facilities to avoid costs of <u>annual reporting</u>, were estimated as 4 hours of owner/operator time per facility (page 31).</p> <p>Ecology should review the cost benefit analysis to ensure that identical activities are estimated at the same number of units of time in the cost and benefit sections.</p> <p>[Commenter: A-05]</p>	<p>A-05-23</p> <p>Please see response to comment O-02-22.</p>
<p>A-05-25</p> <p>173-350</p> <p>Preliminary Regulatory Analysis</p> <p>Ecology is required under the Administrative Procedures Act to "determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented. Ecology should include further</p>	<p>A-05-25</p> <p>Ecology does not believe additional analysis is required. The proposed rule does not prevent WSDOT or local agencies from reusing construction aggregate or recycling concrete. In fact, the adopted rule raises the ceiling limit for the amount of material that can be managed on a site before a solid waste permit is required. The method of determining throughput on a site has been revised because the previous rule, while imposing limits has proven nearly impossible to enforce.</p>

<p>detail in the Preliminary Regulatory analysis of how this proposed rule would help implement RCW 70.95, which specifically requires the department of transportation and certain government entities to reuse construction aggregate and recycled concrete (effective 1 January 2016).</p> <p><i>[Comment included two footnotes: RCW 24.05.328(d); and RCW 70.95.805 paraphrased]</i></p> <p>[Commenter: A-05]</p>	<p>RCW 70.95.805 (1) says, "The department of transportation and its implementation partners must collaboratively develop and establish objectives and strategies for the reuse and recycling of construction aggregate and recycled concrete materials. This process must include the development of criteria for the successful and sustainable long-term recycling of construction aggregate and recycled concrete materials in Washington state transportation, roadway, street, highway, and other transportation infrastructure projects."</p> <p>While Ecology is excluded as an implementation partner, Ecology appreciate the efforts of the Washington State Department of Transportation and all local agencies to improve waste management in Washington state by identifying the best options for reuse and recycling of all materials.</p> <p>The adopted rule places reasonable limits on size of piles and the time they can remain in place without requiring a solid waste handling permit, and also offers mechanisms to reduce the administrative burden. There is no limit on time of storage for piles under 250 cubic yards, and no upper limit on the volume when stored on a site subject to the Sand and Gravel General Permit issued by Ecology. Between 250 and 2,000 cubic yards, a solid waste permit is not required when a facility notifies, submits an annual report, and keeps record keeping to demonstrate compliance with throughput requirements. Facilities subject to solid waste permitting are those with a broader range of materials, those with larger volumes of material that are not covered by the Sand and Gravel permit, and facilities in the middle range that cannot or will not notify, report, and demonstrate that they are not accumulating material without developing an outlet for the product. Ecology believes this is a reasonable and balanced approach.</p>
<p>A-05-24</p> <p>173-350</p>	<p>A-05-24</p>

<p>Preliminary Regulatory Analysis</p> <p>Ecology is required under the Administrative Procedures Act to "determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented." The County has provided significant information on the probable costs of the initial draft, preliminary draft and the proposed rule during comment periods to Ecology. Please refer to <i>Attachment 1: Proposed Rule Cost Information</i> for further information on probable costs associated with the proposed rule. Ecology must fulfill its obligation under the Administrative Procedures Act and include these costs in the preliminary regulatory analysis.</p> <p>The County maintains 1,598 miles of roadway (i.e. conveyance structure) in accordance with maintenance standards accepted by Ecology in the Snohomish County Drainage Manual. As show by this single example the proposed rule would result in significant costs to the County. Ecology must consider these impacts in the Preliminary Regulatory Analysis. County staff may be made available upon request to assist Ecology as Subject Matter Experts in quantifying costs associated with the proposed rule to agencies that manage transportation infrastructure.</p> <p>[Commenter: A-05]</p>	<p>Please see the response to comment A-05-01 and comment A-05-30.</p>
<p>A-05-16</p> <p>The County has also determined that under the proposed rule testing would be required because only test-driven parameters are provided in the proposed rule for soils where a release has occurred. This would result in significant costs for many materials that would not meet</p>	<p>A-05-16</p> <p>The rule does not require testing of soils. That remains at the discretion of the owner, based on their diligent approach to determining the likelihood of contamination.</p>

<p>requirements for contaminated soil under existing standards or the proposed rule.</p> <p>Ecology should include the impacts of all testing associated with the proposed rule in the preliminary Regulatory Analysis, SEPA and costs associated with implementing the National pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvement, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.</p> <p>[Commenter: A-05]</p>	<p>The rulemaking does not address NPDES permitting or Municipal Stormwater Permits.</p> <p>Please see responses to comment A-05-01, comment A-05-08, and comment A-05-14.</p>
<p>A-05-18</p> <p>Ecology should consider the costs of testing materials under the proposed rule that are unknown or unlikely to trigger regulation as a contaminated soil. Under the proposed rule labeling these materials "street wastes" will preclude re-use as fill or alternative daily cover at landfills unless a test is performed and the soils are determined not to meet a MTCA standard. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.</p> <p>[Commenter: A-05]</p>	<p>A-05-18</p> <p>The rule does not require testing. It requires the responsible agency to be prudent in its assessment of the likelihood of contamination, and then test appropriately if necessary. Soils would be precluded for use as fill only if their placement would create a contaminated site under MTCA. Nothing in the rule precludes soils failing to meet a MTCA standard from being used as an alternative daily cover.</p> <p>Please see response to comment A-05-29.</p>
<p>A-05-01</p> <p>At this time the County has concluded that the proposed rule has fallen short of providing sufficient clarity to the regulated community. The County has also concluded that the proposed rule would result in impacts to the</p>	<p>A-05-01</p> <p>In making a decision to adopt the rule, the agency weighed all comments and the implications of any arguments as to clarity or proper process. Ecology does not agree that the rule extends to materials (street waste in particular) that have not been</p>

County (and other agencies that maintain transportation infrastructure). In the proposed rule Ecology seeks to regulate materials that are not currently regulated under the Solid Waste Handling Standards or as a hazardous substance under the Model Toxics Control Act - Cleanup (for example Street Wastes). Therefore the costs and impacts of regulating these materials must be included within the Preliminary Regulatory Analysis and State Environmental Policy Act (SEPA) documentation. The County respectfully requests:

- Ecology provide clarity to the proposed rule and undergo an additional round of public review and comment, and
- Ecology consider the impacts of the proposed rule on agencies that maintain transportation infrastructure and municipal separate storm sewer systems.

Please refer to *Table 1: Comments on the Solid Waste Handling Standards proposed rule* and *Attachment 1: Proposed Rule Cost Information* for further information on the above concerns as well as additional remarks on the proposed rule. This memorandum includes comments from the Public Works-Road Maintenance Division based on:

- The proposed rule filed with the Office of the Code Reviser on January 23rd, 2018;
- The current WAC 173-350 Solid Waste Handling Standards;
- The Model Toxics Control Act-Cleanup (MTCA, WAC 173-340);
- The Revised Code of Washington 70.95

subject to either solid waste regulations or the Model Toxics Control Act. The commenter in fact, refers to this material as street "wastes," properly characterizing them. Street wastes, when not removed from the street, will enter ditches and stormwater conveyances. In either case, the removal and placement of materials could in some circumstances create a contaminated site subject to standards of the Model Toxics Control Act, which is the threshold Ecology is using to differentiate between soils that are not wastes, and soils that are.

Ecology held dozens of meetings on the rule overall, over a period of four and a half years. Our process included two informal comment periods, one formal comment period, and a great deal of communication with stakeholders from start to finish. The question of how to best handle potentially contaminated soils received as much or more attention and feedback from stakeholders as any aspect of the rule. Ecology did not believe that convening another round of public comments would add value to the process, and would likely only further a debate that the agency would ultimately be left to resolve.

Regarding impacts to agencies that maintain transportation infrastructure and municipal stormwater systems, as stated in the Preliminary Regulatory Analyses, the baseline for this rulemaking (requirements that would need to be met regardless of the rule amendments to clean and contaminated soil definitions) includes the Model Toxics Control Act (MTCA). Under existing laws and rules, the MTCA standards already apply.

Adopted amendments to WAC 173-350 define "clean soil," "contaminated soils" and "contaminated dredged material" using existing MTCA standards for cleanup levels. These standards would need to be met with or without the rule amendments, regardless of current practice, since placing contaminants on the ground at concentrations above cleanup levels can create liability for cleanup under MTCA. Since behaviors needed to comply with MTCA are part of the

<ul style="list-style-type: none"> • The State Environmental Policy Act Determination of Non Significance (Agency File Number AO# 13-18); • The Preliminary Regulatory Analysis (Publication 18-07-022); • The Response to Comments, Chapter 173-350 WAC, Second Preliminary Draft (December 2016); • Coordination with Ecology staff over the phone and at the Public Hearing on March 6th, 2018; and • Guidance for Remediation of Petroleum Contaminated Sites, Toxics Cleanup Program, Publication No. 10-09-057 (Revised June 2016). <p>[Commenter: A-05]</p>	<p>baseline, their costs and benefits are not considered new and, therefore, are not included in the Regulatory Analyses.</p> <p>Ecology's analyses must assume compliance to be able to compare proposed or adopted requirements to existing (baseline) requirements. If parties are not currently in compliance with MTCA when moving contaminated soils and dredged materials, they are not reflected in the Regulatory Analyses. Ecology also cannot estimate with certainty the degree to which noncompliance occurs unless an enforcement action has been taken or a cleanup site identified. Ecology acknowledges changing behavior from noncompliance to compliance could result in compliance costs such as testing, site assessment, and/or changes in disposal or eventual disposition of contaminated soils and dredged materials. Changing behavior to come into compliance with the baseline would also result in benefits such as avoided health and environmental risks of contamination, avoided cleanup costs, or potential legal damages and property value losses from contaminating adjacent land.</p>
<p>A-05-08</p> <p>173-350-100 Contaminated Soil</p> <p>The content of the proposed rule and the explanation provided by Ecology in the Preliminary Regulatory Analysis represent a change in the scope of materials that are currently regulated, <u>not a clarification</u>. Ecology must fully consider the impact of regulating these materials within the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to</p>	<p>A-05-08</p> <p>Please see the response to comment A-05-01.</p> <p>Regarding the State Environmental Policy Act, its purpose is to evaluate environmental impacts. Economic impacts are not considered under SEPA, but are addressed in the regulatory analyses that are prepared with a rulemaking.</p>

<p>manage soils, and cost of contaminated soil disposal.</p> <p>[Commenter: A-05]</p>	
<p>A-05-14</p> <p>The proposed rule creates a change in scope of materials regulated by including a definition of "Release" that is far more restrictive than the definition of a release established under MTCA. Under MTCA: "Release" means any intentional or unintentional entry of any <u>hazardous substance</u> into the environment, including but not limited to the abandonment or disposal of containers of <u>hazardous substances</u>" (underline added). Under the proposed rule "Release" is a new definition and means: "any intentional or unintentional entry of a <u>contaminant</u> into the environment at more than de minimis amounts and includes, but is not limited to, spilling, leaking, pouring, emitting, emptying, discharging, adding, applying, amending, injecting, pumping, escaping, leaching, dumping, or disposing of any <u>contaminant</u>" (underline added).</p> <p>The content of the proposed rule represent a change in the scope of materials that are currently regulated, <u>not a clarification</u>. Ecology must fully consider the impact of regulating these materials within the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated With: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.</p>	<p>A-05-14</p> <p>The definitions of "contaminant" and "contaminate" have not been modified during this rulemaking:</p> <p>The adopted rule addresses contaminants to the extent that they pose a threat to human health or the environment, or violate an applicable regulation. The rule is not constrained to the scope of the Model Toxics Control Act, but in terms of regulating contaminated soils to avoid the creation of contaminated sites, the standards are those under Model Toxics Control Act. If a soil can be moved and placed so as not to create a cleanup site, then it is not considered to be solid waste under the rule. Therefore the scope of materials regulated remains the same.</p> <p>See also the response to comment A-05-06 and comment A-05-08.</p>

<p><i>[Comment included a footnote: WAC 173-340-200]</i></p> <p>[Commenter: A-05]</p>	
<p>A-16-10</p> <p>General changes in the facility sections, 210 - 360</p> <p>SHD appreciates the creation of the "Table 000-A" for exemptions. We have used Table 220-A since 2013 for compost exemptions, and we find it helpful for the facilities as well as for us to explain. It is easy to use and follow; we pick the box that works for the business and it is much easier for them to follow.</p> <p>SHD appreciates that Ecology has added the new section, "documentation" and the restructuring so that the section "operating", follows within the facility sections 210-360. This is a logical progression and the delineation of numbers and letters is good because the sections detail what we need for operating plans. This also mirrors what and how most operators already document and spell out in their operations plans.</p> <p>SHD appreciates that it is written in a manner that most can just follow the numbers and letters to know what to include in their plan. This helps us to review and offer technical assistance to a clear vision provided by the facility operators.</p> <p>[Commenter: A-16]</p>	<p>A-16-10</p> <p>Ecology appreciates health district support for these changes in the structure and format of the rule. Staff believed the tables were easier to interpret, and felt that consistent organization between sections was an important improvement.</p>
<p>O-06-03</p> <p>JHA representatives will be responsible for responding to inquiries that result from implementing the proposed regulations in Chapter 173-350 WAC. Ecology should be</p>	<p>O-06-03</p> <p>Ecology appreciates that local jurisdictional health authorities are on the front lines of implementing this rule. In fact, that is the primary driver behind the revisions related to the management of</p>

<p>aware that JHAs will be facing highly complex of the questions from the public regarding the permitting of projects. In addition, the responses provided by these local government agencies may create new legal liabilities for project proponents. Most JHAs are understaffed to meet their current regulatory responsibilities and are typically not staffed with individuals that have a high level of expertise in developing or applying MTCA cleanup levels. With the likely complexity of questions the JHAs are likely to receive and the potential liability at stake, the timeliness and dependability of the responses will be critical to property development for ports and other parties. Additionally if JHA staff cannot respond to inquiries in a timely manner, project schedules will extend and costs will increase on public and private projects. As a result these agencies will be under tremendous pressure and scrutiny from the regulated community to ensure that their responses are grounded in fact. This regulatory complexity is likely to result in lengthened project schedules and associated costs that, related to port districts, will be borne by taxpayers. WPPA recommends that Ecology ensure the rule provides a mechanism to minimize implementation costs on the JHAs as well as project proponents.</p> <p>[Commenter: O-06]</p>	<p>contaminated soils. Providing guidance and supporting consistent statewide implementation on approaches to the regulation of contaminated soils has been a shortcoming in the state program virtually since its inception. The primary responsibility for managing solid waste rests with the generator, not regulatory authorities. Persons charged with moving or disposing of potentially contaminated soil will need to be prudent in their approach to assessment, which may or may not indicate that testing is appropriate. Ecology will provide guidance to assist in decision making, and training for both local regulators and site managers.</p>
<p>O-06-02</p> <p>Administrative burdens and implementation costs are created by the requirement to determine if soil or dredged material meets the definition of "contaminated" as determined by MTCA cleanup levels. The provision will result in greatly expanded material sampling and chemical laboratory testing, cleanup level development and evaluation, record keeping, real estate transaction due diligence changes, and JHA communications without providing a clear environmental benefit. Of particular concern, these new requirements and costs are</p>	<p>O-06-02</p> <p>The commenter states it is a burden to know whether a soil is contaminated to the point that it would exceed thresholds established under MTCA. Ecology concurs, but the adopted rule does not in fact obligate a person or agency to perform any analysis. The effect of the rule is to make visible an existing obligation to understand the quality or state of contamination of soils being removed from a site, and in the context of their final deposition.</p>

<p>not considered or assessed in the Preliminary Regulatory Analysis (Ecology January 2018) which states that "No additional costs over baseline..." are associated with the Section 100 definitions. At a minimum, Ecology must evaluate and share the likely costs to comply with these provisions. Furthermore, the agency should consider that these provisions were at the core of concerns raised by the regulated community in 2017.</p> <p>[Commenter: O-06]</p>	
<p>O-14-17</p> <p>WAC 173-350-235 & 995 - Soil and Sediment Criteria and Use.</p> <p>WRRRA supports the safe and environmentally responsible handling of solid waste, including contaminated soils. WRRRA appreciates that DOE has made an effort to more effectively regulate the movement of contaminated soils, and believes the rule has improved overall from earlier drafts with the addition of more SSL's for different sites. However, the rule still falls short in crucial areas which threaten to undermine both the goals of the rule and Washington's system for the safe and responsible disposal of solid and contaminated waste to ensure public safety and environmental protection.</p> <p>WRRRA, several individual solid waste companies who own landfill requested representation on the work group that developed this rule to voice these concerns, but were repeatedly denied. Our companies have vast experience in analyzing, transporting and receiving these type of materials and still know our knowledge and expertise would have been relevant, meaningful, and offered significant contributions to DOE in development of this rule. The work group also lacked participation by other relevant parties, including</p>	<p>O-14-17</p> <p>Please see response to comment O-16-05.</p> <p>The agency is not obligated to convene work groups for rule development. Ecology staff could have formulated the rule based on best judgement and proposed it directly. Instead, Ecology solicited stakeholder interest and formed multiple work groups. Ecology posted the proceedings of dozens of meetings to the web for nearly two years. Ecology frequently advised stakeholders of progress, and encouraged work group members to share and solicit input from all interested parties. Not everyone was invited to the table at every group, but no one was turned away who wished to attend and listen as a member in the audience. WRRRA has noted its own active participation in this process. In regards to tribal participation, Ecology specifically advised both the chair and natural resources manager of every tribe in the state at each of the three phases of rule development, and invited them to discuss relevant issues, government-to-government. And importantly, Ecology conducted broad notice at each phase of the rule development process, including notifications to publications that might be of interest to stakeholders - even outside the state of Washington. Ecology believes the process was inclusive and respectful and that obligations to facilitate stakeholder involvement were exceeded.</p>

<p>environmental groups, county solid waste divisions, or the Tribes of Washington, all groups which could be concerned with the environmental and storm water impacts associated with spreading contaminated soils across the state.</p> <p>[Commenter: O-14]</p>	
<p>O-15-08</p> <p>Finally, the Department should develop a robust implementation and education plan alongside the formal rule proposal to ensure this test achieves its desired results. The determination of waste test and accompanying definitional changes have the potential to dramatically alter the landscape of solid waste handling in Washington State. These changes will almost certainly be for the worse if all stakeholders are not included in the implementation and education process that will accompany these rules. The Department will also need to play an active role in the implementation process to ensure localities understand and follow the intent of the new rules.</p> <p>[Commenter: O-15]</p>	<p>O-15-08</p> <p>Ecology is required to have an implementation plan for each rule it adopts. The Administrative Procedures Act specifies the content of the plan. The plan is a formal publication by the agency, in this case WDOE 18-07-05. The plan is available through Ecology’s publications database, and is linked on-line from the rulemaking web site. The content of the plan reflects internal considerations, but specifically responds to input from stakeholders. Ecology will offer training in various locations around the state.</p>
<p>O-15-14</p> <p>Applicability and Determination of Waste Comments Summary</p> <p>A robust implementation plan from the Department will be required for this and all other sections to achieve their goals. This process plan should be substantial and Involve all stakeholders, government, and industry.</p> <p>[Commenter: O-15]</p>	<p>O-15-14</p> <p>Please see response to comment O-15-08.</p>

<p>O-15-15</p> <p>WAC 173-350-210 Recycling and Material Recovery Facilities.</p> <p>WRRRA believes that all solid waste handling facilities should be subject to inspections, audits, and some level of permitting and oversight at both the local and state level. A significant amount of waste handling activity In Washington already goes effectively unregulated under current Department rules, due in part to a lack of enforcement. As a result, sham recyclers who hurt cities, counties, the state and legitimate lawful companies while exposing Washington citizens to unnecessary environmental risks have proliferated under this environment.</p> <p>The updates to exempt facilities in this draft rule are positive and should do a great deal to limit both the scope of the exemption and the number of qualifying facilities. Overall, we hope that the changes will provide for a much stronger enforcement apparatus. The rule should shrink the overall universe of exempt facilities and require many more to become permitted. Newly permitted facilities will be subject to enforcement under the local permitting regime and the number of exempt facilities should be substantially smaller and easier to observe. Again, the Department has not provided a list of potentially affected entitles or even estimates as to the number of affected entitles. As such we are unable to fully support or understand the scope of these changes. Further, we will continue to question the legitimacy of any economic impact statements by the Department that does not take into considerations which facilities are impacted, and will not be able to do so until the information is provided and verified. Beyond that, the rule still requires several changes to achieve Its goals.</p> <p>[Commenter: O-15]</p>	<p>O-15-15</p> <p>This comment was received during a previous informal comment period and was incorporated by reference with WRRRA’s submittal during the formal comment period. Ecology appreciates WRRRA’s interest in reducing the number of permit exempt facilities. It is not possible for Ecology to know which facilities will be exempt or subject to permitting under the rule, because Ecology cannot control decisions of facility managers in response to the rule. Meeting the criteria for exemption or permitting will be up to the operators and choices they make for their facilities. Ecology cannot specify what facilities will choose to meet the constraints of exemption.</p> <p>Generally, there was not support for simply eliminating provisions for permit exemptions. The adopted rule represents what Ecology believes are the best steps forward in this regard. Ecology will continue to work with local jurisdictional health authorities, facility managers, WRRRA and others to ensure that facilities do comply with requirements for permitting when applicable.</p> <p>Please see response to comment O-13-05.</p>
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<p>O-15-50</p> <p>WRRRA appreciates the opportunity to comment on these rules still in development and DOE's consideration of WRRRA and the solid waste industry's concerns. We will continue to call into question any cost-benefit or economic analysis on this proposal until sufficient information is provided on the affected entities.</p> <p>[Commenter: O-15]</p>	<p>O-15-50</p> <p>Please see response to comment O-15-15.</p>
<p>O-15-01</p> <p>WAC 173-350-020 & 021 Applicability and Determination of Solid Waste</p> <p>The determination of waste test, now WAC 173-350-021, has evolved well over the course of this rulemaking process. If successfully implemented, it should strengthen and support the definition of solid waste in RCW 70.95 by providing clarity for both industry and regulators. When read in conjunction with certain definitional changes, this section has the potential to deregulate many solid waste facilities in Washington. As the Department has been unwilling or unable to provide a list of potentially affected entities, we are unable to fully gauge the scope of these changes and thus are not able to fully support this otherwise useful section. However, definitional changes aside, some clarification is still required to ensure this test can be effectively implemented.</p> <p>[Commenter: O-15]</p>	<p>O-15-01</p> <p>Please see response to comment O-15-15.</p>
<p>O-05-10</p> <p>Finally, WRRRA's understanding was that the changes in this section would shrink the number of exempt facilities and require many more to become permitted. The economic analysis indicates the changes to this rule may only</p>	<p>O-05-10</p> <p>Ecology has lists of permitted facilities in the state, as well as many exempt facilities (typical recyclers for example). The previous rule encompassed some activities where the boundaries of regulation were hazy. Using facilities storing wastes in piles as an</p>

<p>impact ten facilities. Our understanding was based in part on the list of solid waste facilities and their status as permitted or exempt posted on the Department website. Since that time, Department staff has indicated that this publicly accessible resource is inaccurate and no accurate listing of the solid waste facilities and their permit status is available.</p> <p>Despite numerous requests throughout this process, the Department has not only been unable to produce a list of potentially affected entities that will need to become permitted based on the changes in this rule, but does not appear to possess an accurate listing of the facilities it is tasked with regulating. As such we are unable to fully support or understand the scope of these changes. We continue to question the legitimacy of any economic impact statements by the Department that does not take into consideration which facilities are impacted, and will not be able to do so until the information is provided and verified. WRRRA continues to assert the absolute necessity for the Department, tasked as the statewide overseer of solid waste facilities, to keep and make available an accurate listing of the facilities it purports to regulate.</p> <p>[Commenter: O-05]</p>	<p>example, Ecology cannot know how many facilities might have been violating the previous regulation in terms of size limit or retention of materials on site. The previous rule in fact makes it very easy for facilities to argue that they are not subject to permitting, and makes it extremely difficult for regulators to determine otherwise. Ecology attempted to address this problem with this rulemaking. Using material recovery facilities as another example, Ecology cannot know with certainty which facilities operating without permits might choose to alter operations to avoid the requirement to obtain a permit under the proposed rule, or which facilities holding permits might choose to alter operations in order to avoid further regulation. And as in the case of piles, there was some margin of uncertainty in application of the previous rule.</p> <p>Ecology understands if WRRRA wishes to view the economic analysis with a margin of skepticism because of uncertainty in underlying data or assumptions. Ecology disagrees with the implication that Ecology has been unwilling or unable for lack of thoughtful consideration to answer WRRRA's inquiry.</p> <p>Please see response to comment O-15-15.</p>
<p>A-19-02</p> <p>We expect the cost associated with soils handling/disposal to rise, particularly for WSDOT's maintenance operations. As an example, we estimate that the changes associated with managing street waste and material from maintaining drainage conveyances will increase WSDOT's maintenance costs by over \$6M annually.</p>	<p>A-19-02</p> <p>As a sister agency, Ecology can certainly appreciate increases in operating costs. The rule does not create a new obligation for managing these materials. It defaults to the existing standards under the Model Toxics Control Act. The adopted rule does make that existing obligation more apparent. Ecology has committed to developing guidance that</p>

[Commenter: A-19]	will assist stakeholders in a diligent approach to assessing and managing these materials.
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<p>22. Soils & Dredged Materials</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>O-09-01</p> <p>Associated General Contractors (AGC) of Washington appreciates the opportunity to provide these comments regarding the Department of Ecology's Solid Waste Handling Standards CR-102 rule.</p> <p>AGC thanks DOE for removing Section 995 that was in previous drafts of the rule. We were concerned that the transfer of impacted soils or impacted sediments permitted under the previous draft rule may expose contractors to potential liability under MTCA or SWHS, including citizen suit liability, for releases or potential releases of contaminants at levels above those for clean soil and clean sediment in WAC 173-350-995, but not above existing levels at the receiving site. Therefore, we are pleased to have Section 995 removed.</p> <p>[Commenter: O-09]</p>	<p>O-09-01</p> <p>Comment noted.</p>
<p>O-09-03</p> <p>pH: The language in the CR-102 will further limit what types of material qualify as clean, increasing costs and requiring disposal of potentially reusable material into a landfill. pH is already addressed by water quality and dangerous waste regulations. Information supporting further pH regulations hasn't been identified and these requirements could curtail common sense handling of material outside the 4.5 to 9.5 pH range. Many soils naturally occur with a pH of 10.0. Plus, composted soils are allowed a pH range of 5 to 10.0. It is contradictory to allow composted soils to have an upper pH limit of 10.0, when the clean soil</p>	<p>O-09-03</p> <p>For comment on pH, please see response to comment B-01-01.</p> <p>Recycled aggregate, such as crushed concrete, is not soil and so its use is not affected by changes to clean and contaminated soil definitions. Ecology has adjusted the definitions for both soil and engineered soil to clarify that concrete and asphalt are not soil.</p>

<p>definition only allows a pH of 9.5. And again, here the CR-102 conflicts with RCW 70.95.805, requiring WSDOT to use recycled concrete. We suggest removing the pH language from the rule, or at least allow clean soils up to a pH of 10.0.</p> <p>[Commenter: O-09]</p>	
<p>O-09-06</p> <p>Street waste: The proposed rule uses "street waste" as an example of contaminated soils. However, street waste is not always contaminated, and this rule would cause otherwise clean street waste to be disposed of in a solid waste landfill, unnecessarily adding costs to a project. We recommend removing street waste as an example of contaminated waste.</p> <p>[Commenter: O-09]</p>	<p>O-09-06</p> <p>Ecology feels soil that contains contaminants from a release could be harmful and should be assessed to ensure use of such materials does not pose a risk to human health or the environment. Street waste is one such type of material. Stormwater conveyance structures are places where contaminants from streets can accumulate at concentrations that could be harmful if indiscriminately placed. Throughout the rule revision process, it has been clear that listing the types of materials Ecology intends to provide standards for in relation to soils is helpful, and street waste is one of the targeted types that has been inconsistently managed in the state. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils.</p>
<p>B-01-01</p> <p>Definition of Clean Soil (page 9). The agency has chosen to define clean to include a pH range of 4.5 to 9.5 for soils which may contain a constituent that could affect pH. This is an unrealistic standard.</p> <p>a. First - many soils naturally occur up to a pH of 10.0 (CalPortland can provide data upon request) and the standard for impacted soils should mimic the pH found in nature</p> <p>b. Second, composted soils are allowed a pH range of 5 to 10 (see page 41). A</p>	<p>B-01-01</p> <p>Soil with natural pH of 10 would be clean soil in the rule. Ecology revised the definition of "clean soil" to clarify that soils in their natural background condition are clean soil given that no release of a contaminant has occurred. The clean soil definition also allows placement of soil impacted by release of a contaminant to exceed a pH of 9.5 if natural background at the placement site is above this limit.</p> <p>Compost is applied in limited quantity in a thin layer on the ground surface and therefore is not comparable to soil used as fill. Ecology would have to reassess compost pH limits should it be used as</p>

<p>composted soil is an amalgamation of many raw materials which may impact the pH of the soil. Ultimately, composted soils are typically placed at the ground surface and are exposed to precipitation and runoff. It seems contrary to allow composted soils to have an upper pH limit of 10.0, when otherwise the clean soil definition only allows a pH of 9.5</p> <p>CalPortland requests the Agency correct this discrepancy and harmonize the standard to allow clean soils up to a pH of 10.0.</p> <p>[Commenter: B-01]</p>	<p>fill, in addition to the concentration of other contaminant limits allowed for compost.</p> <p>pH below 4.5 and above 9.5 can pose risks to human health and the environment. The limits proposed are largely consistent with water quality regulations.</p>
<p>A-13-02</p> <p>Second, the definition of "impacted soil and impacted sediment" also appears to be a less protective standard. The adoption of MTCA standards for the definition of "clean" or "contaminated" soil is not an appropriate application of that regulation or a suitable mechanism for oversight of these operations. Street waste, and material collected by vactor and sweeper trucks, would not be required to be permitted under the proposed standards and would not have necessary oversight from local public health districts. Local municipalities have managed this material and struggled to handle it appropriately but using MTCA cleanup requirements to characterize this material places a burden on municipalities required by NPDES stormwater permits to collect and handle this material. Further, a variety of contamination is possible in street waste that would not exceed cleanup standards but that does not mean land applying, stockpiling or otherwise managing this material is appropriate as "clean" soil. Street waste is routinely collected in a wide context of land use and runoff characteristics that may not be obviously contaminated and it is not obvious that state cleanup program standards are</p>	<p>A-13-02</p> <p>The rule no longer uses the terms "impacted soil" or "impacted sediment" as it did in earlier drafts, opting instead for defining clean and contaminated soil and dredged material.</p> <p>Ecology clarified in the definition of "contaminated soil" that it is solid waste which requires management at a solid waste facility meeting applicable solid waste rules. Contaminated soil is already listed in the definition of solid waste. Street waste that cannot be managed as clean soil will need to go to a treatment facility permitted under WAC 173-350-320, Piles used for storage or treatment, or a permitted landfill. There is a 90-day time limit in the rule for piles stored without a permit. Ecology anticipates most street waste facilities will continue to need solid waste permit oversight. Please also see response to comment A-05-15.</p> <p>Ecology appreciates the concept of reference tables and listing of test parameters, but earlier drafts of the rule attempting to provide listed numerical limits in tables using a variety of standards (not just MTCA) were largely unsupported by commenters, who found earlier drafts too complex and too</p>

<p>adequate to address water quality, groundwater or soil contamination issues. Regulatory oversight of this material by local public health districts as a solid waste provides necessary technical and enforcement oversight.</p> <p>Soil characterization is also a major concern for large fill and quarry reclamation areas where local municipalities can assume oversight from the DNR following issuance of a local grading permit. This type of work does not assume that low-level contamination is present, nor does it fully account for common sources of fill soil that may contain contaminants. The test parameters previously listed in the first draft of the standards and the associated technical guidance would be helpful for implementing an oversight program but this authority should be included with local public health district oversight of similar solid waste operations. Low-level contamination, particularly as it relates to petroleum products, benzene and other common constituents routinely seen in underground storage tank soils, for example, are excluded from MTCA but should still be regulated to protect public health and the environment. The City is particularly concerned that granular, well-draining soil and gravel veins present throughout our jurisdiction and common near quarry reclamation projects will expose our drinking water resources to contamination if the proposed and oversimplified definition of "clean" soil is implemented.</p> <p>[Commenter: A-13]</p>	<p>restrictive. A person will need to consider all impacts, which will vary by the contaminant present in the material and the placement site, in applying appropriate MTCA standards. MTCA cleanup levels are based on protecting human health and the environment. Large fill sites such as reclamation pits that accept soils impacted by release of a contaminant will need to account for all environmental impacts in determining appropriate MTCA standards to apply to the site.</p> <p>Ecology is considering creation of guidance for managing soils in light of the proposed clean and contaminated soil definitions.</p>
<p>A-17-03</p> <p>Street Waste is included in the definition of "Impacted soil and impacted sediment" management of impacted soil and impacted sediment consistent with the criteria in WAC 173-350-995 is not subject to regulation as solid waste handling. Does this mean that solid waste facilities currently under vector waste (with</p>	<p>A-17-03</p> <p>The commenter references language from an earlier version of the rule that no longer exists. However, the issue raised is still relevant. Ecology clarified in the definition of "contaminated soil" that it is solid waste which requires management at a solid waste facility meeting applicable solid waste rules. Contaminated soil is already listed in the definition</p>

<p>street sweeping) will not be required to hold a permit any longer? If so, CCPH does have concerns of having these facilities be without local oversight. CCPH has experienced at our facilities instances where the "final product" has been allowed to accumulate in voluminous piles that were determined to be unmanageable - the piles were later hauled for landfill disposal. Additionally, the facility has had nuisance odor, leachate management and runoff concerns. Regulatory oversight at these facilities has ensured processes are implemented to protect public health and the environment.</p> <p>[Commenter: A-17]</p>	<p>of solid waste. Street waste that cannot be managed as clean soil will need to go to a treatment facility permitted under WAC 173-350-320, Piles used for storage or treatment, or a permitted landfill. There is a 90-day time limit in the rule for piles stored without a permit. Ecology anticipates most street waste facilities will continue to need solid waste permit oversight. Please also see response to comment A-05-15.</p>
<p>A-17-07</p> <p>995 - Soil and sediment and use criteria There have been so many "offline discussions", changes and updates to this section and it is still complicated and challenging to follow from a solid waste enforcement perspective. A webinar or training explaining how this impacts LHJs and various business examples as it pertained to this topic would have been helpful. (it appears this has been removed all together - it has been challenging to follow this specific topic). Additionally, as it was not fully INCORPORATED into the heart document, it really seemed more like an afterthought.</p> <p>[Commenter: A-17]</p>	<p>A-17-07</p> <p>Ecology explained in its Response to Comment on the second informal comment draft the reasons for removing section 995 and opting for revisions to the definitions of clean and contaminated soil and dredged material. During initial implementation of the adopted rule, Ecology will provide guidance and training to local health jurisdictions to be sure new language is understood.</p>
<p>B-11-03</p> <p>Clean Soil - The agency has chosen to define clean to include a pH range of 4.5 to 9.5 for soils which may contain a constituent that could affect pH. This is an unrealistic standard.</p>	<p>B-11-03</p> <p>Please see response to comment B-01-01.</p>

<ul style="list-style-type: none"> • Many soils naturally occur up to a pH of 10.0 and the standard for impacted soils should mimic the pH found in nature • Composted soils are allowed a pH range of 5 to 10 (see page 41). A composted soil is an amalgamation of many raw materials which may impact the pH of the soil. Ultimately, composted soils are typically placed at the ground surface and are exposed to precipitation and runoff. It seems contrary to allow composted soils to have an upper pH limit of 10.0, when otherwise the clean soil definition only allows a pH of 9.5 <p>[Commenter: B-11]</p>	
<p>A-01-01</p> <p>Clarification requested in the definition of “contaminated dredged material.” Currently, the only place where contaminated dredged material is defined as a solid waste is in the definition for “solid waste” in Section -100. However, when reading Section -021(1)(a), the reader is referred to the definition of “contaminated dredged material,” which does not indicate that contaminated dredged material is a solid waste. The reader must refer to the definition of “solid waste” to find this connection, and there are no prompts or other breadcrumb trail to lead the reader from the “contaminated dredged material” definition to the “solid waste” definition.</p> <p>We recommend that the definition of “contaminated dredged material” be updated to include a statement that contaminated dredged material is considered solid waste.</p> <p>This comment also applies to the definition of “contaminated soil.”</p>	<p>A-01-01</p> <p>In WAC 173-350-100, Ecology added a statement in the definitions of “contaminated dredged material” and “contaminated soil” to clarify that they are solid waste.</p>

[Commenter: A-01]	
<p>A-01-02</p> <p>Clarification requested in Section -021 (Determination of solid waste). Section -021(1)(a) [abbreviated below; emphasis added by me] states:</p> <p>“...This section may not be applied to the following materials <i>regulated under other sections of this chapter</i>:</p> <p>(a) Contaminated soil and contaminated dredged materials defined in WAC 173-350-100;”</p> <p>The rule, as written, is confusing because “other sections of this chapter” previously referred to the now defunct Section -995 from the December 2016 revision. There is no comparable section in the January 2018 revision. Do you intend to refer to the Definitions (-100) section?</p> <p>One possible suggestion would be to change the italicized language in -021 from “This section may not be applied to the following materials <i>regulated under other sections of this chapter</i>” to “<i>that are defined as solid waste under other sections.</i>” However, I realize that this proposed language may not be appropriate for items (1)(b) [Composted materials] and (1)(c) [Digestate], so I leave it to your best judgement if or how any change should be made to this section to provide clarity in this matter.</p> <p>[Commenter: A-01]</p>	<p>A-01-02</p> <p>Ecology removed “regulated under other sections of this chapter,” in WAC 173-350-021(1) to provide clarity.</p>
<p>B-09-02</p> <p>It is unclear what is the underlying intention of 173-350-020(2)(y) is. If one generated contaminated soil from a historically impacted</p>	<p>B-09-02</p> <p>The commenter is correct that the exclusion in WAC 173-350-020(2)(y) is there to allow management of contaminated soil at or near where it</p>

<p>site, and the soil did not designate as Dangerous Waste, then one could presume the soil is not regulated or regulated by the Solid Waste Regulations depending on the order in which the rules are read. If they were trying to determine how the soil would be regulated and first read 173-350-020(2)(y) which states:</p> <p><i>(2) This chapter does not apply to the following:</i> - (y) Contaminated soil, as defined in WAC 173-350-100, placed at or near the location of generation within a project site;</p> <p>In this scenario, contaminated soil would not be regulated under WAC 173-350 or WAC 173-303. Usually, this soil would be stockpiled for off-site disposal. However, 173-350-020(2)(y) gives the impression that there are no requirements for managing this soil on-site and in fact off-site disposal isn't even required.</p> <p>It is understood that under 173-350-021(2) a material is considered a solid waste if the material has been discarded, abandoned, or disposed of. However, this section comes after 173-350-020(2)(y) so the soil - which could be considered discarded and a solid waste determined by 173-350-020 - would not be regulated by WAC 173-350 because "the chapter" doesn't apply to this soil per 173-350-020(2)(y).</p> <p>Nucor requests additional clarity on the precedence amongst sections of the rule and guidance, potentially a flow chart, on how to manage soils with varying levels of contamination (e.g. clean, below MTCA, below Dangerous Waste, etc.) and different final dispositions (e.g. reused on-site, applied to land off-site, disposed of via Subpart D landfill, etc.).</p> <p>[Commenter: B-09]</p>	<p>originated. Ecology excluded this activity from rule as any impacts to a site have already occurred and no further impact comes from putting soil back in place. Ecology wants to encourage use on-site through the exclusion to prevent potential impact elsewhere and did not want to capture this as a solid waste handling activity under the proposed rule. Ecology modified this exclusion to provide better clarity about "project site" and to be clear that the exclusion is for soil removed "from the ground," not removed from an industrial or treatment facility to be placed onto the grounds of that facility.</p> <p>WAC 173-350-021 does not apply to contaminated soil per WAC 173-350-021(1)(a).</p> <p>During the initial implementation period of the adopted rule, Ecology will consider creating guidance for management of soil and dredged material impacted by release of a contaminant and appreciates the commenter's suggestions.</p>
<p>B-09-03</p>	<p>B-09-03</p>

<p>The definition of clean soil incorporates large segments WAC 173-340 and its inherently laborious methods for determining if one has "clean soil" and therefore if the soil is solid waste, or at least regulated by WAC 173-350. For example, the definition of clean soil requires one to establish theoretical cleanup levels for the soil in question. However cleanup levels are site specific, can be risk based, and are typically used for remediating a site.</p> <p>Many facilities with a long history of industrial operations will find it difficult to determine whether sampled levels represent typical background or are evidence of a potential release. Additionally since cleanup levels are based on the final location of soils but may be handled or disposed of via an intermediary, generators may not be able to accurately designate soils. Based on Nucor's understanding of the rules, a generator could relocate soils as 'clean soils' based on its intended final location but if an intermediary chooses to send it to another location, the generator could be liable for improper disposal of contaminated soils.</p> <p>[Commenter: B-09]</p>	<p>The commenter is correct in that just as exists now, assessing potential impacts at an industrial site, or any site where a release has occurred, can be complex and will vary from site to site. Proposed changes to the definitions for managing such materials provide clarity on where one needs to manage such materials, but it does not simplify or address the characterization process.</p> <p>Ecology revised the definition of "clean soil" to clarify that soils in their natural background condition are clean soil given that no release of a contaminant has occurred.</p> <p>The rule is silent on liability, but typically the owner of an illegal dump site is responsible for cleanup and is who enforcement authorities would work with towards compliance.</p>
<p>A-20-01</p> <p>The following comments are submitted by the Port of Grays Harbor in support of the Department of Ecology Proposed Rulemaking - Chapter 173-350 WAC Solid Waste Handling Standards.</p> <p>The Port generally supports Ecology's efforts to update the solid waste rules, many of which are decades old and are at least partially inconsistent with current practices and standards. We specifically support the following proposed changes related to the upland placement of dredged material.</p>	<p>A-20-01</p> <p>Comment noted.</p>

- The reference to clean dredged material in WAC 173-350-020 (2) (g)
- The definition of "Clean dredged material" in WAC 173-350-100
- The definition of "Contaminated dredged material" in WAC 173-350-100
- The definition of "Solid waste" in WAC-173-350-100

The proposed changes will address a significant problem caused by the outdated definitions found in the current version of WAC 173-350-100. Those definitions classify any dredged material that is "not suitable" for open water disposal as being a solid waste. Over the years since the current WAC definitions were established, the Dredged Material Management Program (DMMP) has greatly expanded the conditions under which dredge material may be determined to be "not suitable" for open water disposal well beyond chemical contaminant levels or conditions that pose a threat to human health, terrestrial life, or upland environments. Actually, the DMMP no longer uses the term "not suitable" for open water disposal. They now classify dredge material as being suitable or unsuitable for open water disposal. Their determinations are not based purely on established clean-up standards, but also upon the results of bioassay tests on aquatic organisms. It is extremely difficult and expensive to handle dredged material in accordance with the solid waste rules. This added cost isn't reasonable considering material of the same composition and contamination levels would not be classified as a solid waste if it was removed from an upland site and then placed in the same location as the dredged materials.

We believe the proposed definition's use of the Model Toxic Control Act Cleanup levels as the criteria for determining whether a dredged

<p>material is clean or contaminated, and thus a solid waste is the appropriate standard. Adoption of the language as proposed related to dredge materials is reasonable, will provide clear standards and surety for those who conduct dredging operations, and will adequately protect the environment. For these reasons we strongly recommend the Director adopt the proposed rule changes to WAC 173-350 as related to the handling of dredged material as proposed.</p> <p>[Commenter: A-20]</p>	
<p>O-02-01</p> <p>173-350-100, Contaminated Soil</p> <p>All methods for establishing a cleanup level under MTCA require a terrestrial ecological evaluation for contaminated soils. Therefore, it is unclear what standards are applied by part (a) of the definition without a predetermination that soils are or are not contaminated. For example to determine what MTCA cleanup level to use for the subsequent determination if a soil is clean or contaminated, you would first need to know if the soil is clean or contaminated to see if a terrestrial ecological evaluation is required at the end site location. Ecology should clarify what standards the agency intends to apply to determine if soils are clean versus contaminated.</p> <p>[Commenter: O-02]</p>	<p>O-02-01</p> <p>Please see response to comment A-05-02.</p>
<p>O-02-02</p> <p>173-350-100, Contaminated Soil</p> <p>The effect of the Contaminated Soil definition is that the end disposal site for a material must be known at the time the soil is excavated for any materials where a</p>	<p>O-02-02</p> <p>Please see response to comment A-05-03.</p>

<p>release has occurred in order to determine the Cleanup level under MTCA for part (a) of both the Clean and Contaminated Soil definition. It is unclear what soils from the built environment could be accepted by a soil recycler under the proposed rule because all these materials would have been subject to a release (if the term "release" includes routine vehicle operations per coordination with Ecology staff) and it is unknown what the end disposal site is at the time the recycler accepts it.</p> <p>This may reduce the ability of materials recyclers to accept soil from the built environment which would result in impacts to agencies that manage transportation infrastructure and the overall re-use of road materials consistent with the priorities of the state to encourage recycling above disposal.</p> <p><i>[Comment included footnote: RCW 70.95.010 paraphrased]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-03</p> <p>173-350-100, Contaminated Soil and Clean Soil</p> <p>The effect of the Clean and Contaminated Soil definition is that all materials that have been subject to a release would undergo testing as though the soil had come from a MTCA site (part a of the proposed rule definitions) and an unassociated site would undergo a scoping process under MTCA. Based on the examples provided by Ecology as well as feedback from Ecology staff during phone conversations and the</p>	<p>O-02-03</p> <p>Please see response to comment A-05-04.</p>

<p>public hearing on 3/6/2018: materials maybe considered as having been subject to a release based on their underlying characteristics (not associated with a release, i.e. engineered soil) as well as releases that would commonly be considered de minimis (i.e. routine vehicle operation). The result would be that all materials associated with transportation infrastructure and the built environment (not just street wastes) will be treated as though they are from a MTCA site and disposal or re-use sites would undergo a MTCA scoping process. The Forum respectfully requests that Ecology seek an opinion from the Attorney General to ensure that Ecology is within its scope of authority to regulate soils in this way under RCW 70.95.</p> <p><i>[Comment included a footnote: WAC 173-340-700(5)]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-04</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to the existing WAC 173-350 and WAC 173-340</p> <p>The current definition of contaminated soils: "means soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean-up activities and which contain harmful substances but are not designated dangerous wastes" is consistent with MTCA. The definition of contaminated soils in the proposed rule represents a change that will result in costs above the baseline of the preliminary</p>	<p>O-02-04</p> <p>Please see response to comment A-05-05.</p>

<p>Regulatory Analysis. Therefore Ecology must fully consider the impact of regulating these soils.</p> <p><i>[Comment included a footnote: Preliminary Regulatory Analysis, Publication no. 18-07-002, pg. 23]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-05</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to SEPA Environmental Checklist, WAC 173-340, Preliminary Regulatory Analysis</p> <p>In supporting materials to the proposed rule Ecology has stipulated that changes to the definition "require operators to ascertain they will not create a MTCA cleanup site by the placement of contaminated soils at any particular location", however the proposed rule does not reflect a requirement not to create a MTCA site which would correspond to the definition of hazardous substance and not cleanup levels. Examples of types of hazardous substance releases that are regulated by MTCA include but are not limited to: (v) Any contaminated soil or unpermitted disposal of waste materials that would be classified as a hazardous waste under federal or state law. (vi) Any abandoned containers such as drums or tanks, above ground or buried, still containing more than trace residuals of hazardous substances. (vii) Sites where unpermitted</p> <p>industrial waste disposal has occurred. "</p> <p>The proposed rule regulates soils at a far</p>	<p>O-02-05</p> <p>Please see response to comment A-05-06.</p>

<p>lower threshold than what is required to designate a MTCA site.</p> <p><i>[Comment included three footnotes: SEPA Environmental Checklist, Page 20 of 23; 173-340-200 WAC; and 173-340-300 WAC]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-06</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to SEPA Environmental Checklist, WAC 173-340, Preliminary Regulatory Analysis</p> <p>Furthermore in the Preliminary Regulatory Analysis Ecology identifies that for the purposes of management, contaminated soils and dredged materials are: "materials that are not clean enough to be placed on the land freely (for example as topsoil or quality fill), but that aren't contaminated to the point of being hazardous waste or requiring cleanup under the state Model Toxics Control Act." The Forum interprets this statement to mean that Ecology intends for the proposed rule to regulate soils that are not otherwise regulated under MTCA and at levels lower than hazardous substances required to designate a MTCA site.</p> <p><i>[Comment included a footnote: Preliminary Regulatory Analysis, Publication no. 18-07-002, pg. 61]</i></p> <p>[Commenter: O-02]</p>	<p>O-02-06</p> <p>Please see response to comment A-05-07.</p>

<p>O-02-08</p> <p>173-350-100, Contaminated Soil, petroleum contaminated soils, release and street waste</p> <p>With reference to Appendix IV-G of the 2012 Stormwater Management Manual for Western Washington, as amended in December 2014 and the Phase 1 General Municipal Stormwater Permit</p> <p>The contaminated soil definition is unclear because of the examples Ecology provides. Street waste is identified by Ecology in the current 2012 Stormwater Management Manual for Western Washington, as amended in December 2014, as clean soil under the current Solid Waste Handling Standards: "There are no specific references for reuse and disposal options for street waste in the Solid Waste Handling Standards because they do not apply to clean soils", however street waste is provided as an example of contaminated soil in the proposed rule. The Forum feels that street waste generated through routine maintenance does not meet the proposed definition of contaminated soil because a release has not occurred; under the proposed rule routine operations of vehicles would not constitute a release in relation to petroleum contaminated soils. The Forum also notes that discharges to the municipal separate storm sewer system are currently addressed by the municipalities the Municipal Stormwater Permit. Ecology should eliminate the example of street waste from the definition of contaminated soil.</p> <p><i>[Comment included two footnotes: 2012 Stormwater Management Manual for Western Washington, as Amended in December 2014, Publication number 14-10-</i></p>	<p>O-02-08</p> <p>Please see response to comment A-05-09.</p>
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<p><i>055, Appendix IV-G Recommendations for Management of Street Wastes, Page G-2; and Proposed Rule, definition of “Petroleum contaminated soil” and “Release”]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-09</p> <p>173-350-020 and 173- 350-100, Engineered Soil</p> <p>The proposed rule does not apply to reused engineered soil when used for the same engineering properties in another construction site (ref. proposed rule 173-350-020). However engineered soil is also identified as an example of a contaminated soil which is regulated when moved from one location to another for placement on the ground (ref. proposed rule 173-350-100). It is unclear why engineered soil is included as an example unless Ecology considers the process used to create an engineered soil to constitute a release. Ecology should eliminate the example of engineered soil from the definition of contaminated soil because engineered soil are no more subject to a release than other materials. Is Ecology using the underlying pH of engineered soil to qualify these soils as contaminated, without a release from another source? If Ecology is seeking to classify engineered soil as contaminated soil then Ecology should also consider the impacts of that change including the reduction in reuse of engineered soil, and thereby increased disposal. The proposed rule would work against Washington Statute (70.95 RCW) which generally prioritizes recycling above disposal and specifically requires the</p>	<p>O-02-09</p> <p>Please see response to comment A-05-10.</p>

<p>department of transportation and certain government entities to reuse construction aggregate and recycled concrete (effective 1 January 2016).</p> <p><i>[Comment included two footnotes: RCW 70.95.010 paraphrased; and RCW 70.95.805 paraphrased]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-11</p> <p>173-350-100, contaminated soil</p> <p>Ecology recently released a publication "Guidance for Remediation of Petroleum Contaminated Sites" which includes a section on re-use of Petroleum Contaminated Soils. This guidance sets standards and allows for flexibility of re-used petroleum contaminated soils that do not rely on a site specific MTCA evaluation required by the proposed rule. Ecology should allow for to use of either the standard set by Guidance 10-09-057 or the proposed rule to be used in determining re-use options for Petroleum Contaminated Soils. As Ecology notes in the guidelines "Soils managed consistently with these guidelines will most likely be protective of human health and the environment based on Ecology's past experience."</p> <p><i>[Comment included a footnote: Guidance for Remediation of Petroleum Contaminated Sites, Toxics Cleanup Program, Publication No. 10-09-057 (Revised June 2016)]</i></p>	<p>O-02-11</p> <p>Please see response to comment A-05-12.</p>

<p>[Commenter: O-02]</p>	
<p>O-02-12</p> <p>173-350-100, contaminated soil</p> <p>Ecology should revise the example "and soil likely to have contaminants from industrial or historical activities" to "and soil likely to have contaminants from a release associated with industrial or historical activities" in order to be consistent with the first sentence of the definition.</p> <p>[Commenter: O-02]</p>	<p>O-02-12</p> <p>Please see response to comment A-05-13.</p>
<p>O-02-14</p> <p>173-350-100, Contaminated Soil, petroleum contaminated soils, release and street waste</p> <p>In phone conversations Ecology staff and during the question and answer session of the public hear on 3/6/2018, Marni Solheim indicated that the proposed rule regulates street waste because street waste has an assumption of having been subject to a release. If this is the case, the effect of the term "de minimis" in the definition of release is rendered meaningless. Ecology has identified that routine vehicle operations can be considered a release.</p> <p>If routine vehicle operations are considered to be a release then all materials associated with transportation infrastructure would likely be subject to testing under the proposed rule (not just street wastes). Ecology has noted in its response to comments on the Preliminary Draft: "Ecology feels <u>if there have been releases of</u></p>	<p>O-02-14</p> <p>Please see response to comment A-05-15.</p>

<p><u>contaminants to the removed material</u>; it needs to be assessed to decide appropriate use or disposal options. Other sections of the rule (e.g. pile storage) allow temporary storage at an intermediate location under specific timeframes without invoking permitting or other standards. This allows time to <u>test</u> these soils to assess appropriate final placement" (underline added).</p> <p>[Commenter: O-02]</p>	
<p>O-02-16</p> <p>173-350-100, Contaminated Soil, street waste</p> <p>"Street waste" means solid or dewatered materials collected from stormwater catch basins and similar stormwater treatment and conveyance structures, and materials collected during street and parking lot sweeping.</p> <p>Ecology should delete "and similar stormwater treatment and conveyance structures" from the definition of street waste. The term "conveyance structure" includes the municipal separate storm sewer system which would result in most soils associated with the transportation infrastructure being labeled "street waste" and subject those soils to testing. Conveyance structures includes ditches, streets, curbs, gutters, man-made channels, stormwater drainage systems and pipes which are not terms that should be associated with street waste. This would also include detention/retention ponds and bioswales. Ecology has stated that there is "limited information on the characteristics of waste from detention/retention ponds,</p>	<p>O-02-16</p> <p>Please see response to comment A-05-17.</p>

<p>bioswales, and similar stormwater treatment facilities."</p> <p><i>[Comment included two footnotes: Phase 1 Municipal Stormwater Permit, Issuance Date: August 1, 2012, Modification Date: January 16, 2015, Definition of Municipal Separate Storm Sewer System, pg. 74 of 77; and 2012 Stormwater Management Manual for Western Washington, as Amended in December 2014, Publication number 14-10-055, Appendix IV-G Recommendations for Management of Street Wastes, Page G-1]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-17</p> <p>173-350-100, Contaminated Soil, street waste</p> <p>According to Chapter 70.95 RCW, street waste is defined as solid waste. If materials removed from conveyance structures are classified as solid waste, local agencies could see 3-4 times the amount of material regulated as solid waste. Ecology should consider the costs of testing these materials under the proposed rule that are unknown or unlikely to trigger regulation as a contaminated soil. The proposed rule would also require new locations with solid waste handling facilities and staff to manage them. There is no mention in the cost benefit analysis of how this could impact local agencies who maintain conveyance structures. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to</p>	<p>O-02-17</p> <p>Stormwater conveyance structures are places where contaminants from streets can accumulate at concentrations that could be harmful for indiscriminate placement. Ecology has consistently recommended to jurisdictional health agencies that they oversee street waste proposed for treatment and subsequent use (not disposal in a landfill) under a solid waste permit, and that message has been reflected in the state's stormwater management manuals, referenced by the commenter earlier. Changes to the rule provide clarity about this, but do not change the existing condition.</p> <p>The commenter mentions the cost of testing material unlikely to trigger management as a contaminated soil. The rule makes no reference to required testing, and assumes the person managing a material will use their judgement in making such decisions. The definitions do not preclude a person from deciding that no release to soils has occurred and manage those soils as clean soils.</p> <p>The commenter is correct in that solid waste, including contaminated soil, cannot be taken to a new location and used as fill without meeting applicable solid waste handling facility standards.</p>

<p>manage soils, and cost of contaminated soil disposal.</p> <p>Please also note that under the proposed rule labeling these materials "street wastes" will preclude re-use as fill or alternative daily cover at landfills unless a test is performed and the soils are determined not to meet a MTCA standard. This rule will result in costs to many local agencies who reuse these wastes as alternative daily cover. These costs must also be considered in the cost benefit analysis.</p> <p>[Commenter: O-02]</p>	<p>The commenter is not correct about potential use as alternative daily cover. Like any material, a person can choose to manage soils at a landfill. The definitions for clean and contaminated soil are tied to "placement on or into the ground," not disposal at a solid waste handling facility. Ecology added language to the definitions to provide clarity on this.</p>
<p>O-02-18</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to RCW 70.95</p> <p>The state has prioritized the recycling and reuse of material above disposal. It is unclear what, if any, project proponent would undergo the scoping evaluations required by MTCA to establish cleanup levels for recycled fill materials to be used on a development site. A MTCA scoping evaluation would be required to set cleanup levels under the proposed definition of both clean and contaminated soils taking into account the ecological sensitivity and pathways to receptors of that site. Ecology should consider that the result of the proposed rule may be the reduction in use of recycled aggregate materials, and thereby increased disposal and mining of new fill material. The proposed rule may work against the goals of the State Statute (RCW 70.95).</p>	<p>O-02-18</p> <p>Please see response to comment A-05-19.</p>

<p><i>[Comment included a footnote: RCW 70.95.010 paraphrased]</i></p> <p>[Commenter: O-02]</p>	
<p>O-02-19</p> <p>173-350-100, Contaminated Soil and 173-350-320</p> <p>Ecology should include a null hypothesis that soil and dredged material from regular maintenance of transportation infrastructure is considered clean unless a release of a hazardous substance has occurred. This would reduce the number of sites requiring a piles permit under the proposed rule as well as resolve some of the concerns related to the definition of contaminated soils part (a). This would eliminate requirements under 173-340-700 for presumed to be contaminated soil at potential disposal sites (i.e. a terrestrial ecological evaluation).</p> <p>[Commenter: O-02]</p>	<p>O-02-19</p> <p>Please see response to comment A-05-20.</p>
<p>O-02-28</p> <p><i>Suggestion 1:</i> One of the primary impacts of the Contaminated Soil, Clean Soil, and Contaminated dredged Material and Clean Dredged Material definitions is that a disposal or re-use site must be known at the time soil is excavated. Revising section (a) Of these definitions as suggested below would retain a MTCA-based protective standard, maintain flexibility if the regulated community wants to undergo a full MTCA scoping analysis, allow for soil recyclers to accept soil in two categories for all potential reuse and reuse at industrial properties where the exact site of release is</p>	<p>O-02-28</p> <p>Please see response to comment A-05-28.</p>

<p>unknown at the time material is accepted. This suggestion would not resolve underlying issues with implementing the scoping evaluation of MTCA whereby to determine what standard to test soils the regulated community would need to first know if a soils is contaminated for the purposes of the terrestrial ecological evaluation. This suggestion would also not resolve the overall costs of instituting this more protective standard. The suggested revision for part (a) of the Contaminated Soil, Clean Soil, and Contaminated dredged Material and clean dredged material definitions is:</p> <p>(a) Contains or does not contain] contain contaminants at concentrations that exceed a cleanup level established under:</p> <ul style="list-style-type: none"> • Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340) for all potential reuse, or • Table 745-1 Method A Soil Cleanup Levels for Industrial Properties (WAC 173-340) for reuse at industrial properties, or • Another cleanup level set through the Model Toxics Control Act-cleanup that would be established for the location where soil or dredged material] is placed. <p>[Commenter: O-02]</p>	
<p>O-02-29</p> <p>Suggestion 2: The Forum has determined that several examples provided in the Contaminated Soils definition do not meet the underlying definition (see comment 7 and 8). The Forum has interpreted that Ecology included Street</p>	<p>O-02-29</p> <p>Please see response to comment A-05-29.</p>

<p>Waste as an example of Contaminated Soil in order to recognize that contaminants may accumulate in the environment. However including this as an example of Contaminated Soil effects the interpretation of release, in effect making this part of the definition meaningless because they would have to include routine vehicle operations to which most soil in the built environment is subject. The Forum respectfully requests that Ecology define soils that may be cumulatively impacted by contaminants (such as Street Wastes) separate from the underlying definition of release; and that the determination of when contaminants have accumulated to an extent to require testing be based on the professional judgement of the agency managing the transportation infrastructure or municipal separate storm sewer system. Accepting this suggestion would recognize that contaminants can accumulate in some Street Wastes in excess of a MTCA clean-up level, but would eliminate the costs of testing soils in the built environment that are unlikely to exceed a MTCA clean-up level. Accepting this suggestion would eliminate many costs associated with testing and storage of materials, handling materials twice and reduce the greenhouse gas emissions of managing transportation infrastructure under the proposed rule.</p> <p>[Commenter: O-02]</p>	
<p>A-02-02</p> <p>Applicability, -020(2)(y):</p> <p>Insert at -020(2)(y) - "Contaminated soil, as defined in WAC 173-350-100, placed at or near the location of generation within a project site, or placed at a permitted solid waste handling site."</p> <p>Ecology's WAC 173-350 regulations direct solid waste to permitted facilities, and the</p>	<p>A-02-02</p> <p>This rule (or municipal solid waste landfill rules) applies to facilities handling contaminated soil, such as storage, treatment, or disposal sites. Incorporating the suggested language would remove that authority.</p> <p>The MTCA and pH criteria in the definition are there only for purposes of assessing materials for placement "on or into the ground." They are not meant to apply to placement at a solid waste facility designed to handle contaminated soil or dredged</p>

<p>possessor can't reasonably know whether or not that permitted site would exceed MTCA. This change would make clear that nothing further is required from the possessor of contaminated soil which is placed at a permitted solid waste handling site.</p> <p>[Commenter: A-02]</p>	<p>materials. To provide clarity on where these materials need to be managed, language was added to the definitions of "contaminated soil" and "contaminated dredged materials" stating that they are solid waste and must be managed at a solid waste facility. Ecology also added language to clarify that the need for characterization is based on acceptance standards at the solid waste handling facility.</p>
<p>A-02-01</p> <p>Definitions, -100: Insert "permanent" before "placement" in each definition for contaminated or clean soil or dredged material.</p> <p>[Commenter: A-02]</p>	<p>A-02-01</p> <p>The rule applies to temporary storage or treatment of these materials, not just permanent placement. That being said, there is a 90-day conditional permit exemption under WAC 173-350-320, Piles used for storage or treatment, for storage of contaminated soils to accommodate intermediate storage of materials prior to final placement elsewhere. Ecology did not make any changes to rule language based on this comment.</p>
<p>A-21-03</p> <p>Section 100 - Definitions for Contaminated Soils and Dredged Materials – Receiving Locations</p> <p>The current definitions have unintended implications for temporary or intermediate storage locations where municipal utility operations store temporary piles of contaminated soils or contaminated dredged materials. These intermediate locations are necessary to facilitate immediate removal and restoration of soils/dredged material from the public right-of-way and easements. Once in temporary storage, the soils can be further characterized prior to removal and disposal at final <u>permanent</u> locations.</p> <p>SPU proposes that the definitions be revised to only apply to <u>final</u> placement of</p>	<p>A-21-03</p> <p>Please see response to comment A-02-01.</p>

materials. Please insert “permanent” before “placement” each time it appears in the rule. This would relieve a temporary storage facility from piles permitting (-320) and from having to establish acceptance limits as a limited purpose landfill would:

Clean Dredged Material – *means dredged material that does not contain contaminants from a release. It also includes dredged material that contains one or more contaminants from a release and when moved from location to another for permanent placement on or into the ground:*

(a) *Does not contain contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act – Cleanup, that would be established for the permanent location where dredged material is placed; or*

(b) *Contains contaminants that affect pH, but pH of the dredged material is between 4.5 and 9.5 or within natural background pH limits that exist at the location where dredged material is permanently placed.*

Contaminated Dredged Material – *means dredged material containing one or more contaminants from a release and when moved from one location to another for permanent placement on or into the ground:*

(a) *Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340, Model Toxics Control Act – Cleanup, that would be established for the permanent location where dredged material is placed: or*

(b) *Contains contaminants that affect pH, and pH of the dredged material is below 4.5 or above 9.5 or is not within natural background pH limits that exist at*

the permanent location where dredged material is placed.

An example of a contaminated dredged material may include, but is not limited to, dredged material from surface waters containing contaminants from a release.

Clean Soil – means soil that does not contain contaminants from a release. It also includes soil that contains one or more contaminants from a release and when moved from one location to another for permanent placement on or into the ground:

(a) Does not contain contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act - Cleanup, that would be established for the permanent location where soil is placed: or

(b) Contains contaminants that affect pH, but pH of the soil is between 4.5 and 9.5 or within natural background pH limits that exist at the permanent location where soil is placed.

Contaminated Soil – means soil containing one or more contaminants from a release and when moved from one location to another for permanent placement on or into the ground:

(a) Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act - Cleanup, that would be established for the permanent location where soil is placed; or

(b) Contains contaminants that affect pH, and pH of the soil is below 4.5 or above 9.5 or is not within natural background pH

<p><i>limits that exist at the permanent location where soil is placed.</i></p> <p>[Commenter: A-21]</p>	
<p>A-21-04</p> <p>Section 100 - Definitions for Contaminated Soils and Dredged Materials – Model Toxics Control Act References</p> <p>The current definitions appear to place the burden of proof on the generator by using the terms "...when moved from one location to another ..."</p> <p>In cases where "another location" is owned or operated by a party other than the generator, the burden of proof should be shared by the generator and the receiving facility or location. The generator cannot be held responsible for identifying or establishing the MTCA acceptance limits of a disposal site.</p> <p>The final/permanent disposal site (facility) should be required to inform their customers about their MTCA-related waste acceptance criteria. This burden should be emphasized in the rule through requirements for limited purpose and inert waste landfills to develop and adequately document a waste review/approval process prior to waste acceptance.</p> <p>[Commenter: A-21]</p>	<p>A-21-04</p> <p>The language "...when moved from one location to another..." is there to be clear that only soils to be moved may be captured by the rule. Ecology does not intend for the rule to capture lands with contaminated soil sitting in place as solid waste handling facilities. The rule does not place the burden of characterization on any one party acknowledging that many parties - generator, contractor, consultant, receiving facility, etc. - could be tasked with the responsibility.</p> <p>The MTCA and pH criteria in the definition are there only for purposes of assessing materials for placement "on or into the ground." They are not meant to apply to placement at a solid waste facility designed to handle contaminated soil or dredged materials. To provide clarity on where these materials need to be managed, language was added to the definitions for contaminated soil and dredged materials stating that they are solid waste and must be managed at a solid waste facility. Ecology also added language to clarify that the need for characterization is based on acceptance standards at the solid waste handling facility.</p> <p>Limited purpose landfills are required to design liner systems to handle specific types of waste and would be required through permitting to account for contaminated materials they propose to accept. Inert waste landfills also have permit oversight. If an inert waste landfill proposes to accept soils or dredged materials impacted by release of a contaminant, they would need to include an assessment of what MTCA cleanup levels would be applicable and ensure they accept only materials that are clean soil or dredged material. Language was added to the operating requirements for inert waste landfills in WAC 173-350-410 to address the</p>

	<p>commenter's concern. If an inert waste landfill proposes to accept soil or dredged material impacted by release of a contaminant, it will need to ensure it accepts only materials meeting clean soil and dredged material criteria and address this by describing acceptance criteria and waste characterization procedures, which must be approved as part of solid waste permitting.</p>
<p>A-11-03</p> <p>It is unclear how engineered soil would be regulated. The proposed rule identifies engineered soil as excluded from the rule in the applicability section, however engineered soil is included as an example of contaminated soil in the definitions section. If engineered soil is regulated as interpreted from the proposed rule, then it would impact the reuse of materials from the demolition of concrete-based transportation infrastructure.</p> <p>[Commenter: A-11]</p>	<p>A-11-03</p> <p>Recycled aggregate, such as crushed concrete, is not soil and so its use is unaffected by changes to clean soil and contaminated soil definitions. Ecology adjusted definitions for both “soil” and “engineered soil” to clarify that concrete and asphalt are not soil.</p> <p>The exclusion for reuse of engineered soil in WAC 173-350-020(w) is only for use of engineered soil at another construction project for the same engineering properties. If a project does not call for engineered soils with the same properties, the exclusion will not apply.</p>
<p>A-11-04</p> <p>The proposed rule would disrupt the reuse market. The proposed rule would require soil testing levels to be set through scoping process under the Model Toxics Control Act — Cleanup (MTCA, WAC 173-340) at the site materials are deposited. Therefore, a specific reuse site must be known at the time of soil excavation, It is unclear how the reuse market could function if the end deposit site is unknown at the time materials enter the market.</p> <p><i>[Comment included a footnote: Soils from transportation infrastructure and the built environment are assumed to have been</i></p>	<p>A-11-04</p> <p>Ecology feels that a material that has been impacted by a release of a contaminant, as those terms are defined, needs to be assessed to ensure placement of materials does not pose a risk to human health or the environment. Materials that have not been impacted by release of a contaminant may be managed as clean soil. A soil handler wanting to accept soil that has been impacted by release of a contaminant needs to accept materials with contaminant concentrations that would not violate a MTCA standard applicable to the site, and ensure the soil is not later moved to a location that violates a MTCA standard for that location. A soil handler unable to meet these criteria must conform to applicable solid waste handling standards, such as for storage or treatment. The rule does not prohibit a person from</p>

<p><i>subject to a release based on coordination with Department of Ecology staff.]</i></p> <p>[Commenter: A-11]</p>	<p>managing these materials, but it may require permit oversight.</p> <p>Through work with stakeholders during this rule process, Ecology learned that soil handlers have largely set their own acceptance criteria to ensure they do not manage soils in a way that would later result in cleanup liability. The proposed rule language is similar to this industry standard.</p>
<p>A-05-02</p> <p>173-350-100, Contaminated Soil</p> <p>All methods for establishing a cleanup level under MTCA require a terrestrial ecological evaluation for contaminated soils. Therefore it is unclear what standard is applied by part (a) of the definition without an apriori determination that soils are or are not contaminated. For example to determine what MTCA cleanup level to use for the subsequent determination if a soil is clean or contaminated, you would first need to know if the soil is clean or contaminated to see if a terrestrial ecological evaluation is required at the end site location. Ecology should clarify what standards the agency intends to apply to determine if soils are clean versus contaminated.</p> <p><i>[Comment included a footnote: 173-340-700 WAC]</i></p> <p>[Commenter: A-05]</p>	<p>A-05-02</p> <p>Determining whether or not a soil can be managed as a "clean soil" or must be managed as a "contaminated soil" depends on whether there has been a release of contaminant to the soil, and if yes, if a person can meet the criteria for placement on or into the ground. If a soil containing contaminants from a release cannot be placed on or into the ground in a way that avoids creation of a cleanup site under MTCA, then it is solid waste and requires management at a solid waste handling facility.</p> <p>Ecology clarified this in the definitions of "clean soil" and "contaminated soil." If a soil containing contaminants from a release can be placed on or into the ground so as not to create a cleanup site under MTCA, then it is clean soil, which is not subject to standards for solid waste handling facilities. To determine the latter, assessing what MTCA standard would apply to the receiving site is necessary, and that could include terrestrial ecological evaluation standards depending on conditions at the receiving site.</p>
<p>A-05-03</p> <p>173-350-100, Contaminated Soil</p> <p>The effect of the Clean and Contaminated Soil definition is that the end disposal site for a material must be known at the time the soil is excavated for any materials where a release has occurred in order to determine the Cleanup level</p>	<p>A-05-03</p> <p>Ecology feels that a material that has been impacted by a release of a contaminant, as those terms are defined, needs to be assessed to ensure placement of materials does not pose a risk to human health or the environment. A soil handler wanting to accept soil that has been impacted by release of a contaminant needs to accept materials with contaminant</p>

<p>under MTCA for part (a) of both definitions. It is unclear what soils from the built environment could be accepted by a soil recycler under the proposed rule because all these materials would have been subject to a release (if the term “release” includes routine vehicle operations per coordination with Ecology staff) and it is unknown what the end disposal site is at the time the recycler accepts it.</p> <p>This may reduce the ability of materials recyclers to accept soil from the built environment which would result in impacts to agencies that manage transportation infrastructure and the overall re-use of road materials consistent with the priorities of the state to encourage recycling above disposal.</p> <p><i>[Comment included footnote: RCW 70.95.010 paraphrased]</i></p> <p>[Commenter: A-05]</p>	<p>concentrations that would not violate a MTCA standard applicable to its site, and ensure it does not later move the soils to a location that violates a MTCA standard for that location. A soil handler unable to meet these criteria must conform to applicable solid waste handling standards, such as for storage or treatment. The rule does not prohibit a person from managing these materials, but it may require permit oversight.</p> <p>Through work with stakeholders during this rule process, Ecology learned that soil handlers have largely set their own acceptance criteria to ensure they do not manage soils in a way that would later result in cleanup liability. The proposed rule language is similar to this industry standard.</p> <p>Ecology’s comment regarding “release” and routine vehicle operations was related to street waste management. Street waste concentrates contaminants from routine vehicle operations above that which would be expected to impact a person's yard, for example. Ecology has made no determination that routine vehicle operations would be a "release" in all circumstances.</p>
<p>A-05-04</p> <p>173-350-100, Contaminated Soil and Clean Soil</p> <p>The effect of the Clean and Contaminated Soil definition is that all materials that have been subject to a release would undergo testing as though the soil had come from a MTCA site (part a of the proposed rule definitions) and an unassociated site would undergo a scoping process under MTCA. Based on the examples provided by Ecology as well as feedback from Ecology staff during phone conversations and the public hearing on 3/6/2018: materials maybe considered as having been subject to a release based on their underlying</p>	<p>A-05-04</p> <p>Ecology feels soil that contains contaminants from a release could be harmful and should be assessed to ensure use of such materials does not pose a risk to human health or the environment.</p> <p>The commenter's statement that Ecology considers materials as having been subject to a release based on their underlying characteristics not associated with a release is not correct, and is not supported by proposed rule language. Contaminated soil is tied to release of a contaminant. The commenter lists engineered soils as one such type of material. The rule defines engineered soils and ties it to having been altered by addition of man-made materials, such as addition of cementitious materials, also defined. It does not include soil based on "underlying characteristics," which Ecology</p>

<p>characteristics not associated with a release (i.e. engineered soil), as well as releases that would commonly be considered de minimis (i.e. routine vehicle operation). The result would be that all materials associated with transportation infrastructure and the built environment (not just street wastes) will be treated as though they are from a MTCA site and disposal or re-use sites would undergo a MTCA scoping process. The County respectfully requests that Ecology seek an opinion from the Attorney General to ensure that Ecology is within its scope of authority to regulate soils in this way under <u>RCW 70.95</u>.</p> <p><i>[Comment included a footnote: WAC 173-340-700(5)]</i></p> <p>[Commenter: A-05]</p>	<p>assumes refers to soil that has been unaltered. Ecology has revised the definition of clean soil to clarify that soils in their natural background condition are clean soil, given that no release of a contaminant has occurred.</p> <p>Ecology’s comment regarding “release” and routine vehicle operations was related to street waste management. Street waste concentrates contaminants from routine vehicle operations above that which would be expected to impact a person's yard, for example. Ecology has made no determination that routine vehicle operations would be a "release" in all circumstances. Ecology revised the definition of “clean soil” to include examples of potentially clean soils. It includes soils from undeveloped lands not impacted by releases from industrial or historic activities, similar soils over which development may have occurred, but land use is unlikely to have led to a release, such as use for residential housing, or over which development provided protection from releases, such as coverage by pavement.</p> <p>The Assistant Attorney General's office has advised the agency that there is authority under Chapter 70.95 RCW, Solid waste management - Reduction and recycling, for Ecology to set standards for management of soil containing contaminants.</p>
<p>A-05-05</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to the existing WAC 173-350 and WAC 173-340</p> <p>The current definition of contaminated soils, “means soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean-up activities and which contain harmful substances but are not designated dangerous wastes,” is</p>	<p>A-05-05</p> <p>Ecology changed the definition of “contaminated soil” in the adopted rule. The previous definition was narrow and left uncertainty as to how a person should safely manage soils that had been impacted by a contaminant, but that came from somewhere other than a cleanup site or dangerous waste facility closure. One main purpose of this rule revision was to set a statewide standard for management of any soil impacted by a release of a contaminant. The previous definition led to inconsistent standards between jurisdictions for management of such</p>

<p>consistent with MTCA. The definition of contaminated soils in the proposed rule represents a change that will result in costs above the baseline of the Preliminary Regulatory Analysis. Therefore Ecology must fully consider the impact of <u>regulating these soils</u>.</p> <p><i>[Comment included a footnote: Preliminary Regulatory Analysis, Publication no. 18-07-002, pg. 23]</i></p> <p>[Commenter: A-05]</p>	<p>materials, but local agencies nonetheless applied the solid waste handling standards to such materials.</p> <p>Persons placing soils with contaminants should already be doing so in a way that does not create a cleanup site or violate other environmental laws. The adopted rule is not a change from this baseline.</p>
<p>A-05-06</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to SEPA Environmental Checklist, WAC 173-340, Preliminary Regulatory Analysis</p> <p>In supporting materials to the proposed rule Ecology has stipulated that changes to the definition “require operators to ascertain they will not create a MTCA cleanup site by the placement of contaminated soils at any particular location”, however the proposed rule does not reflect a requirement not to create a MTCA site which would correspond to the definition of hazardous substance and not cleanup levels. Examples of types of hazardous substance releases that are regulated by MTCA include but are not limited to: “(v) Any contaminated soil or unpermitted disposal of waste materials that would be classified as a hazardous waste under federal or state law. (vi) Any abandoned containers such as drums or tanks, above ground or buried, still containing more than trace residuals of hazardous substances. (vii) Sites where</p>	<p>A-05-06</p> <p>Ecology purposefully used the existing definition of "contaminant" as opposed to "hazardous substances" as used in other rules, though a change was considered during this revision process. “Hazardous substance” as defined in other rules includes things irrelevant to solid waste handling standards. For example, this rule does not apply to dangerous wastes, though dangerous wastes are included in definitions for “hazardous substance” in other rules. Ecology finds the definition of "contaminant" is simpler to understand, broader, and more applicable as related to management of soils. Additionally, Chapter 70.95 RCW, the authorizing statute for Chapter 173-350 WAC, provides no definition. This is unlike other rules, whereby "hazardous substance" is defined in the authorizing statute.</p>

<p>unpermitted industrial waste disposal has occurred.” The proposed rule regulates soils at a far lower threshold than what is required to designate a MTCA site.</p> <p><i>[Comment included three footnotes: SEPA Environmental Checklist, Page 20 of 23; 173-340-200 WAC; and 173-340-300 WAC]</i></p> <p>[Commenter: A-05]</p>	
<p>A-05-07</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to SEPA Environmental Checklist, WAC 173-340, Preliminary Regulatory Analysis</p> <p>Furthermore in the Preliminary Regulatory Analysis Ecology identifies that for the purposes of management, contaminated soils and dredged materials are: “materials that are not clean enough to be placed on the land freely (for example as topsoil or quality fill), but that aren’t contaminated to the point of being hazardous waste or requiring cleanup under the state Model Toxics Control Act.” The County interprets this statement to mean that Ecology intends for the proposed rule to regulate soils that are not otherwise regulated under MTCA and at levels lower than hazardous substances required to designate a MTCA site.</p> <p><i>[Comment included a footnote: Preliminary Regulatory Analysis, Publication no. 18-07-002, pg. 61]</i></p>	<p>A-05-07</p> <p>Contaminated soils being managed within a cleanup site under MTCA are excluded from this rule under WAC 173-350-020(x). Attempting to move soils from such cleanup sites for placement elsewhere onto the ground would be subject to this rule, as would the movement of other soils impacted by release of a contaminant for placement onto the ground. The rule intends to mirror MTCA levels for the site of placement, not set lower levels than would be applicable to such sites if they were subject to MTCA. Ecology also set a pH standard for releases affecting pH as MTCA does not have a pH standard. If a person places soils impacted by release of a contaminant onto the ground so that it exceeds a MTCA cleanup level applicable to that site, that person would violate this rule as well as create liability for cleanup under MTCA.</p>

<p>[Commenter: A-05]</p>	
<p>A-05-09</p> <p>173-350-100, Contaminated Soil, petroleum contaminated soils, release and street waste</p> <p>With reference to Appendix IV-G of the 2012 Stormwater Management Manual for Western Washington, as amended in December 2014 and the Phase 1 General Municipal Stormwater Permit</p> <p>The Contaminated Soil definition is unclear because of the examples Ecology provides. Street waste is identified by Ecology in the current 2012 Stormwater Management Manual for Western Washington, as amended in December 2014, as clean soil under the current Solid Waste Handling Standards: “There are no specific references for reuse and disposal options for street waste in the Solid Waste Handling Standards because they do not apply to clean soils”, however street waste is provided as an example of contaminated soil in the proposed rule. The County feels that street waste generated through routine maintenance does not meet the proposed definition of contaminated soil because a release has not occurred; under the proposed rule routine operations of vehicles would not constitute a release in relation to petroleum contaminated soils. The County also notes that discharges to the municipal separate storm sewer system are currently addressed by the County through section S5.C.8 of the Phase 1 Municipal Stormwater Permit. Ecology should eliminate the example of street waste <u>from the definition of contaminated soil.</u></p> <p><i>[Comment included three footnotes: 2012 Stormwater Management Manual for Western Washington, as Amended in December 2014, Publication number 14-10-055, Appendix IV-G Recommendations for Management of Street</i></p>	<p>A-05-09</p> <p>Ecology is unsure why the statement the commenter references is in the Stormwater Management Manual, and it does provide confusion. However, the same section of the same document the commenter references provides clear language several times that street waste is solid waste subject to management under Chapter 173-350 WAC. Two examples:</p> <p>1) On page G-2 under the header "Contamination in Street Waste Solids," the section in bold leads with the statement "Street waste is solid waste." It then explains that street waste is managed by local health departments and makes references to management under both Chapter 70.95 RCW and Chapter 173-350 WAC.</p> <p>2) Page G-5 leads in bold type with the statement "Permitting of street waste treatment and storage facilities as solid waste handling facilities by the local health department is required."</p> <p>Since the previous version of Chapter 173-350 WAC does not provide language regarding reuse, Appendix IV-G of the Stormwater Management Manual was written to provide guidance. Proposed definitions in the rule for managing such materials follows the same principals as the guidance, which also references MTCA in helping determine whether uses are safe for human health and the environment.</p> <p>Contaminants include anything that does not occur naturally in the environment. Street waste is known to contain materials that do not occur naturally, including petroleum from vehicles, at more than de minimis amounts.</p> <p>The rule has a distinct definition for "petroleum contaminated soil" to differentiate it from "street waste." This was more applicable to earlier drafts of</p>

<p><i>Wastes, Page G-2; Proposed Rule, definition of “Petroleum contaminated soil” and “Release;” Phase 1 Municipal Stormwater Permit, Issuance Date: August 1, 2012, Modification Date: January 16, 2015]</i></p> <p>[Commenter: A-05]</p>	<p>the rule where different test parameters were specified for the two materials. The rule has definitions for each that will be helpful when Ecology creates guidance relating to management of soils impacted by release of contaminants.</p> <p>Regarding the comment related to a Municipal Stormwater Permit, this rule does not apply to wastewater or stormwater discharges and so the comment is not applicable and is not addressed in this response.</p>
<p>A-05-10</p> <p>173-350-020 and 173-350-100, Engineered Soil</p> <p>The proposed rule does not apply to reused engineered soil when used for the same engineering properties in another construction site (ref. proposed rule 173-350-020). However engineered soil is also identified as an example of a contaminated soil which is regulated when moved from one location to another for placement on the ground (ref. proposed rule 173-350-100). It is unclear if/when engineered soil would be regulated under the proposed rule. It is also unclear why engineered soil is included as an example unless Ecology considers the process used to create an engineered soil to constitute a release. Ecology should eliminate the example of engineered soil from the definition of contaminated soil because engineered soil are no more subject to a release than other materials. Is Ecology using the underlying pH of engineered soil to qualify these soils as contaminated, without a release from another source?</p> <p>If Ecology is seeking to classify engineered soil as contaminated soil then Ecology should also consider the impacts of that</p>	<p>A-05-10</p> <p>“Engineered soil,” as defined, has been altered by the addition of products like jet grout, which results in the creation of high pH soils. This constitutes a release as defined. High pH is the primary concern with engineered soil as high pH could lead to mobilization of naturally-occurring metals in the soil, and can lead to impacts to surface water where disposal is uncontrolled. If one can reuse these soils in another project for the same engineering properties, Ecology proposes to exclude that activity from the rule as it is not viewed as solid waste disposal, but as reuse as defined in the rule. Ecology also excluded from the rule any replacement of such material back to the point of generation [WAC 173-350-020(y)]. If a person must otherwise dispose of engineered soil where pH or other contaminants would be above MTCA levels that would apply to the proposed placement site, then it must be managed as contaminated soil at a solid waste handling facility that meets applicable rule requirements.</p> <p>Recycled aggregate, such as crushed concrete, is not soil and so its use is not affected by changes to clean and contaminated soil definitions. Ecology adjusted definitions for both “soil” and “engineered soil” to clarify that concrete and asphalt are not soil.</p>

<p>change including the reduction in reuse of engineered soil, and thereby increased disposal. The proposed rule would work against Washington Statute (70.95 RCW) which generally prioritizes recycling above disposal, and specifically requires the department of transportation and certain government entities to reuse construction aggregate and recycled concrete (effective 1 January 2016).</p> <p><i>[Comment included two footnotes: RCW 70.95.010 paraphrased; and RCW 70.95.805 paraphrased]</i></p> <p>[Commenter: A-05]</p>	
<p>A-05-12</p> <p>173-350-100, contaminated soil</p> <p>Ecology recently released a publication “Guidance for Remediation of Petroleum Contaminated Sites” which includes a section on re-use of Petroleum Contaminated Soils. This guidance sets standards and allows for flexibility of re-used petroleum contaminated soils that do not rely on a site specific MTCA evaluation required by the proposed rule. Ecology should allow for to use of either the standard set by Guidance 10-09-057 or the proposed rule to be used in determining re-use options for Petroleum Contaminated Soils. As Ecology notes in the guidelines “Soils managed consistently with these guidelines will most likely be protective of human health and the environment based on Ecology’s past experience.</p> <p><i>[Comment included a footnote: Guidance for Remediation of Petroleum Contaminated Sites,</i></p>	<p>A-05-12</p> <p>During the stakeholder process for this rulemaking, there was consensus by industry and enforcement agencies that standards need to be in rule and not guidance. For industry, this creates stable criteria that cannot be changed without going through a public process. For enforcement agencies, having standards in rule allows for better enforcement, since legal support for enforcing guidance has been problematic. Additionally, in discussions with the author of the section of the referenced guidance, as well as agency staff that work on cleanup sites (petroleum contaminated sites are the target of the guidance), the limits in the section may be outdated and should be recalculated based on present day risk-based criteria. Though this guidance was updated recently, significant updates were not made to the referenced section.</p>

<p><i>Toxics Cleanup Program, Publication No. 10-09-057 (Revised June 2016)</i></p> <p>[Commenter: A-05]</p>	
<p>A-05-13</p> <p>173-350-100, contaminated soil</p> <p>Ecology should revise the example “and soil likely to have contaminants from industrial or historical activities” to “and soil likely to have contaminants from a release associated with industrial or historical activities” in order to be consistent with the first sentence of the definition.</p> <p>[Commenter: A-05]</p>	<p>A-05-13</p> <p>Ecology revised the definition as suggested by the commenter.</p>
<p>A-05-15</p> <p>173-350-100, Contaminated Soil, petroleum contaminated soils, release and street waste</p> <p>In phone conversations Ecology staff and during the question and answer session of the public hearing on 3/6/2018, Marni Solheim indicated that the proposed rule regulates street waste because street waste has an assumption of having been subject to a release. If this is the case, the effect of the term “de minimis” in the definition of release is rendered meaningless. Ecology has verbally identified that routine vehicle operations can be considered a release.</p> <p>If routine vehicle operations are considered to be a release then all materials associated with transportation infrastructure would likely be subject to <u>testing under the proposed rule (not just street wastes)</u>. Ecology has noted in its</p>	<p>A-05-15</p> <p>Ecology has consistently recommended that jurisdictional health agencies oversee the management of street waste as a solid waste handling activity. The previous version of the rule does not capture such materials in the definition of "contaminated soil," which has been problematic and one of the reasons for proposed changes to the definition. While all health agencies may not have tracked the management of street waste or have chosen not to pursue oversight, many have. There are several street waste decant facilities permitted under WAC 173-350-320, Piles used for storage or treatment. Testing of material proposed to go back on the land is expected, and typical of such operations. The adopted change to definitions is not inconsistent with current practice or current guidance.</p> <p>Ecology revised the definition of “clean soil” to include examples of potentially clean soils. “Clean soil” includes soils from undeveloped lands not</p>

<p>response to comments on the Preliminary Draft: “Ecology feels <u>if there have been releases of contaminants to the removed material</u>; it needs to be assessed to decide appropriate use or disposal options. Other sections of the rule (e.g. pile storage) allow temporary storage at an intermediate location under specific timeframes without invoking permitting or other standards.</p> <p>This allows time to <u>test</u> these soils to assess appropriate final placement” (underline added).</p> <p>[Commenter: A-05]</p>	<p>impacted by releases from industrial or historic activities, and similar soils over which development may have occurred, but land use is unlikely to have led to a release, such as use for residential housing, or over which development provided protection from releases, such as coverage by pavement.</p>
<p>A-05-17</p> <p>173-350-100, Contaminated Soil, street waste</p> <p>Ecology should delete “and similar stormwater treatment and conveyance structures” from the definition of street waste. The term “conveyance structure” includes the municipal separate storm sewer system which would result in most soils associated with the transportation infrastructure being labeled “street waste” and subject those soils to testing. This would include but is not limited to detention/retention ponds, bioswales, ditches, manmade channels, and culverts. Ecology has stated that there is “limited information on the characteristics of waste from detention/retention ponds, bioswales, and similar stormwater treatment facilities.”</p> <p><i>[Comment included two footnotes: Phase 1 Municipal Stormwater Permit, Issuance Date: August 1, 2012, Modification Date: January 16, 2015, Definition of Municipal Separate Storm Sewer System, pg. 74 of 77; and 2012 Stormwater Management Manual</i></p>	<p>A-05-17</p> <p>Ecology feels soil that contains contaminants from a release could be harmful and should be assessed to ensure use of such materials does not pose a risk to human health or the environment. Stormwater conveyance structures are places where contaminants from streets can accumulate at concentrations that could be harmful for indiscriminate placement. Ecology did not change the definition to preclude soil from such structures from having to be considered as possibly containing a release at more than a de minimis amount. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils.</p>

<p><i>for Western Washington, as Amended in December 2014, Publication number 14-10-055, Appendix IV-G Recommendations for Management of Street Wastes, Page G-1]</i></p> <p>[Commenter: A-05]</p>	
<p>A-05-19</p> <p>173-350-100, Contaminated Soil</p> <p>With reference to RCW 70.95</p> <p>The state has prioritized the recycling and reuse of material above disposal. It is unclear what, if any, project proponent would undergo the scoping evaluations required by MTCA to establish cleanup levels for recycled fill materials to be used on a development site. A MTCA scoping evaluation would be required to set cleanup levels under the proposed definition of both clean and contaminated soils taking into account the ecological sensitivity and pathways to receptors of that site. Ecology should consider that the result of the proposed rule may be the reduction in use of recycled aggregate materials, and thereby increased disposal and mining of new fill material. <u>The proposed rule would work against the goals of the State Statute (RCW 70.95).</u></p> <p><i>[Comment included a footnote: RCW 70.95.010 paraphrased]</i></p> <p>[Commenter: A-05]</p>	<p>A-05-19</p> <p>Recycled aggregate, such as crushed concrete, is not soil and so its use is not affected by changes to clean and contaminated soil definitions. Ecology adjusted definitions for both soil and engineered soil to clarify that concrete and asphalt are not soil. The proposed changes to the definitions regarding soils make it clear that a person should not be creating a cleanup site under MTCA in their management of soils impacted by release of contaminants. A person should already ensure they are not creating cleanup sites under MTCA. In assessing placement of a soil, if ecological receptors need to be considered under MTCA in determining safe contaminant limits at the site of placement, then the person managing the soils will need to account for this protection, and should already be doing this.</p> <p>The purpose of Chapter 70.95 RCW includes establishment of a solid waste program that ensures solid waste is managed to prevent land, air, and water pollution. Ecology feels proposed changes help meet this mandate by ensuring soils that contains contaminants from a release are managed in a way so that they do not pose a risk to human health or the environment.</p>
<p>A-05-20</p>	<p>A-05-20</p>

<p>173-350-100, Contaminated Soil and 173-350-320</p> <p>Ecology should include a null hypothesis that soil and dredged material from regular maintenance of transportation infrastructure is considered clean unless a release of a hazardous substance has occurred. This would reduce the number of sites requiring a piles permit under the proposed rule as well as resolve some of the concerns related to the definition of contaminated soils part (a). This would eliminate requirements under 173-340-700 for presumed to be contaminated soil at potential disposal sites (i.e. a terrestrial <u>ecological</u> evaluation).</p> <p>[Commenter: A-05]</p>	<p>Stormwater conveyance structures associated with transportation infrastructure are places where contaminants from streets can accumulate at concentrations that could be harmful for indiscriminate placement.</p> <p>Ecology did not change the definitions to preclude soil from such structures from having to be considered as possibly containing a release at more than a de minimis amount. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils.</p> <p>Ecology revised the definition of “clean soil” to include examples of potentially clean soils. It includes soils from undeveloped lands not impacted by releases from industrial or historic activities, and similar soils over which development may have occurred, but land use is unlikely to have led to a release, such as use for residential housing, or over which development provided protection from releases, such as coverage by pavement.</p>
<p>A-05-28</p> <p><i>Suggestion 1:</i> One of the primary impacts of the Contaminated Soil, Clean Soil, and Contaminated Dredged Material and Clean Dredged Material definitions is that a disposal or re-use site must be known at the time soil is excavated. Revising section (a) of these definitions as suggested below would retain a MTCA-based protective standard, maintain flexibility if the regulated community wants to undergo a full MTCA scoping process, allow for soil recyclers to accept soil in two categories for all potential reuse and reuse at industrial properties where the exact site of re-use is unknown at the time material is accepted. This suggestion would not resolve underlying issues with implementing the scoping evaluation of MTCA whereby to</p>	<p>A-05-28</p> <p>Ecology appreciates the concept of reference tables, but earlier drafts of the rule attempting to provide listed numerical limits in tables were largely unsupported by commenters, who found earlier drafts too complex. Listing one, two, or all potential cleanup level standards under MTCA could cause confusion. A person needs to consider applicable impacts, which will vary by the contaminant present in the material and the placement site. The suggested language could be interpreted to mean only contaminants considered under Method A (only 30 or so contaminants) are of concern, or that the referenced tables are all a person needs to consider.</p>

<p>determine what standard to test soils the regulated community would need to first know if a soils is contaminated for the purposes of the terrestrial ecological evaluation. This suggestion would also not resolve the overall costs of instituting this more restrictive standard. The suggested revision for part (a) of the Contaminated Soil, Clean Soil, and Contaminated Dredged Material and Clean Dredged Material definitions is:</p> <p>(a) Contains [or does not contain] contaminants at concentrations that exceed a cleanup level established under:</p> <ul style="list-style-type: none"> • Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340) for all potential reuse, or • Table 745-1 Method A Soil Cleanup Levels for Industrial Properties (WAC 173-340) for reuse at industrial properties, or • Another cleanup level set through the Model Toxics Control Act-Cleanup that would be established for the location where soil [or dredged material] is placed. <p>[Commenter: A-05]</p>	
<p>A-05-29</p> <p><i>Suggestion 2:</i> The County has determined that several examples provided in the Contaminated Soils definition do not meet the underlying definition. The County has interpreted that Ecology included Street Waste as an example of Contaminated Soil in order to recognize that contaminants may accumulate in the environment. However</p>	<p>A-05-29</p> <p>Stormwater conveyance structures are places where contaminants from streets can accumulate at concentrations that could be harmful for indiscriminate placement. The definition includes examples of materials that "may" be contaminated soil. Ecology did not change the definition to preclude soil from such structures from having to be</p>

including this as an example of Contaminated Soil effects the interpretation of release, in effect making this part of the definition meaningless because it would have to include routine vehicle operations to which most soils in the built environment are subject. The County respectfully requests that Ecology define soils that may be cumulatively impacted by contaminants (such as Street Wastes) separate from the underlying definition of release; and that the determination of when contaminants have accumulated to an extent to require testing be based on the professional judgement of the agency managing the transportation infrastructure or municipal separate storm sewer system. Only material that has been determined to potentially contain contaminants that have accumulated to an extent to require testing should be considered "street waste." For example if a storm season results in sediment blocking a ditch (i.e. a conveyance structure) and the agency determines that the material does not meet the threshold to require testing then material should not be considered "street waste." Under the current proposed rule "waste" cannot be reused as fill or alternative daily cover at landfills.

Accepting this suggestion would recognize that contaminants can accumulate in some Street Wastes in excess of a MTCA clean-up level, but would eliminate the costs of testing soils in the built environment that are unlikely to exceed a MTCA clean-up level. Accepting this suggestion would eliminate many costs associated with testing and storage of materials, handling materials twice and reduce the greenhouse gas emissions of managing transportation infrastructure under the proposed rule.

considered as possibly containing a release at more than a de minimis amount.

The commenter suggests adding clarity about basing the need for testing on the professional judgement of the agency managing materials. The rule makes no reference to required testing, and assumes the person managing a material will use their judgement in making such decisions. This is consistent with how industry currently manages these materials. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils. Ecology added a standard to provide statewide consistency and to be enforceable should someone manage material at a location that poses risks to human health and the environment.

The commenter is correct in that solid waste, including contaminated soil, cannot be taken to a new location and used as fill without meeting applicable solid waste handling facility standards. The commenter is not correct about potential use as alternative daily cover. Like any material, a person can choose to manage soils at a landfill. The definitions for "clean soil" and "contaminated soil" are tied to "placement on or into the ground," not disposal at a solid waste handling facility. Ecology added language to the definitions of "clean soil" and "contaminated soil" to provide clarity on this.

[Commenter: A-05]	
<p>A-05-30</p> <p><u>Attachment 1: Proposed Rule Cost Information</u></p> <p>The Proposed Rule Cost Information below provides an estimate of limited costs associated with proposed rule compliance for 100 tons of material excavated from transportation infrastructure located approximately 10 miles from a County home-shop location and 10 miles from a disposal vendor. 100 tons represents the average amount of material one dump truck can move from one location to another location 10 miles away in a summer season day (10 hours). 100 tons is also provided as an estimate of the amount of material that could be expected from 500 feet of ditching or swale cleaning, 1 mile of shoulder pulling, 3 private stormwater detention ponds, or 1 cross-culvert replacement. Please note that 10 miles represents a low estimate of distance traveled from a County home-shop location to a roadway maintenance site. Many roadways maintained by the County are more than 60 miles from a home-shop. Costs for handling materials from distant locations under the proposed rule may be many times more than the costs provided below.</p> <p>The costs evaluated below include equipment and staff time used to handle materials; as well as vendor costs to test materials, perform a scoping process under MTCA, and dispose of clean soils. The costs do not include: environmental staff time, management and administration, costs associated with permits, structural</p>	<p>A-05-30</p> <p>Ecology appreciates the commenter's description of an example project and how they believe new rule language would impact that project. However, the person assumes testing is required. As adopted, the rule makes no reference to required testing, and assumes a person managing a material will use their judgement in making decisions about whether testing may be warranted. This is consistent with how industry currently manages these materials. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils. In this rule, Ecology added a standard to provide statewide consistency and to be enforceable should someone manage material at a location that poses risks to human health and the environment.</p>

improvements, BMPs for temporary storage, record keeping, and costs of contaminated soil disposal. Cost estimates are based on staff interviews.

Example Scenario: the County performs 500 feet of emergency ditching after a winter storm season. Recycling facilities cannot set a cleanup level because the exact end use site is unknown, and no developers have undertaken a MTCA scoping evaluation to determine a cleanup level in order to accept recycled soil at their development site. Since the County does not believe the material is contaminated they take the soil to a County home-shop at a cost of \$900 (dump truck and worker for 1 day) and select a disposal vendor that has historically accepted ditching material. County staff do not have the capacity to perform a scoping process on the disposal site so the County hires a contractor to perform this work at a cost of \$3,500 (estimated to be the equivalent of a Phase 1 for a non-complicated “clean” site). The time it takes to contract and perform the scoping process exceeds 90 days, this may result in a violation if once a cleanup level is established, the soil is determined to be contaminated. With the cleanup level now in hand, the County collects and sends samples to a laboratory at a cost of \$500 (estimated 3 samples using MTCA Table 745-1) and 2 weeks later the results are returned. The soil does not exceed a standard established under MTCA for the disposal site. The County transports the material from the shop to the disposal site at a cost of \$1,200 (dump truck, loader and worker for 1 day) and pays approximately \$800 in disposal fees. Under the proposed rule the soil does not enter the reuse market and has cost the County approximately

<p>\$6,900 to dispose of; which is an increase of \$5,200 from costs associated with current operations (approximately 4 times the cost of current operations).</p> <p>The County maintains 1,598 miles of roadway and associated drainage facilities (i.e. conveyance structure, refer to the proposed definition of street waste). As shown by this single example, the proposed rule would result in significant costs to the County. The proposed rule would also result in the loss of County Road Maintenance production due to increased staff and equipment per maintenance activity. This loss in production could lower the County’s ability to maintain the road network as well as meet performance standards established under the Phase 1 Municipal Stormwater Permit.</p> <p><i>[Comment included a footnote: No terrestrial ecological evaluation performed. Cost would increase significantly under other assumptions.]</i></p> <p>[Commenter: A-05]</p>	
<p>A-06-03</p> <p>“Clean soil” – The TPCHD does not agree that soils containing up to 2,000 mg/kg of diesel and heavy oil range hydrocarbons are truly “clean soils” and acceptable for “unrestricted land uses” per Chapter 173-340, Model Toxics Control Act. These soils will typically have a distinguishable petroleum odor and should not be used in the manufacturing of topsoil products. The TPCHD has had multiple experiences in the past where petroleum impacted soils have been incorporated into topsoil products and</p>	<p>A-06-03</p> <p>Ecology understands the concern regarding petroleum odors associated with soil containing 2,000 mg/kg of diesel and heavy oil range hydrocarbons. However, MTCA considers these limits safe for human health. Proposing to apply a standard for odor alone would be unusual and is not applied to other materials used on the ground, such as manure, crop residue, or food processing materials.</p>

<p>sold to the public. These instances have resulted in complaints from the public who purchased what they thought was a clean topsoil product, only to find out that it smelled like petroleum and upon testing, was confirmed to contain petroleum constituents. The levels that are being proposed in the rule may very well allow these sorts of examples to become commonplace. Furthermore, if this threshold remains, the TPCHD anticipates that generators of diesel and heavy oil petroleum hydrocarbons soils could abuse this criteria threshold by diluting these impacted soils to avoid disposal costs. The TPCHD strongly recommends using the ‘old’ MTCA A standard of 200 mg/kg for diesel and heavy oil range hydrocarbons. This lower threshold for diesel and heavy oil hydrocarbons will provide jurisdictional health departments a state-wide regulatory standard to competently address the two common potential abuses raised in this comment if the standard for petroleum hydrocarbons remains at 2,000 mg/kg.</p> <p>[Commenter: A-06]</p>	
<p>O-12-01</p> <p><u>Definition of Clean Soil</u> We agree with the comments as submitted by Matt Hinck of CalPortland. <i>The agency has chosen to define clean to include a pH range of 4.5 to 9.5 for soils, which may contain a constituent that could affect pH. This is an unrealistic standard</i></p> <p><i>a. First - many soils naturally occur up to a pH of 10.0 (CalPortland can provide data upon request) and the standard for impacted soils should mimic the pH found in nature</i></p>	<p>O-12-01</p> <p>Please see response to comment B-01-01.</p>

<p><i>b. Second, composted soils are allowed a pH range of 5 to 10 (see page 41). A composted soil is an amalgamation of many raw materials, which may impact the pH of the soil. Ultimately, composted soils are typically placed at the ground surface and are exposed to precipitation and runoff. It seems contrary to allow composted soils to have an upper pH limit of 10.0, when otherwise the clean soil definition only allows a pH of 9.5</i></p> <p><i>We support CalPortland's request to the Agency correct this discrepancy and harmonize the standard to allow clean soils up to a pH of 10.0.</i></p> <p>[Commenter: O-12]</p>	
<p>O-06-01</p> <p>I am writing on behalf of the members of the Washington Public Ports Association (WPPA) to comment on the CR-102 proposed revisions to the Chapter 173-350. Our goal is to provide useful comments, helping to shape an effective rule that minimizes unnecessary costs and administrative requirements while protecting public health and the environment. We appreciate the considerable effort that has been made to draft the proposed regulation and to accommodate our interests. Staff at the Washington State Department of Ecology (Ecology) has consistently worked in good faith to address the concerns ports have raised during the rule development process.</p> <p>As you know, WPPA represents 75 port districts in our state. The size and complexity of these ports varies greatly; from the large-scale international trade facilities operated by the ports of Seattle and Tacoma, to the targeted, job-creating economic development engines that characterize ports in communities across the state. Regardless of their size, the economic development mission of ports invariably</p>	<p>O-06-01</p> <p>Please see response to comment A-05-28.</p> <p>Regarding engineering controls, as this is allowed under MTCA and proposed standards are tied to MTCA, they could be a consideration in deciding appropriate concentration limits allowed at the site of placement. Keep in mind that MTCA Method A concentrations already account for protection of groundwater and were established using the procedures in Method B.</p>

involves property management, construction projects, and moving soil and dredged material. As a result, our members are knowledgeable about their environmental responsibilities when handling these materials. Our comments reflect the views of seasoned, well-informed environmental managers with a well-established commitment to complying with state regulations.

WPPA representatives participated in discussions with Ecology and others on August 22 and September 19, 2017 regarding concerns that the draft rule appeared to impose solid waste facility permitting requirements on Port construction project material stockpiles. We understood based on these discussions that Ecology would not require infrastructure and earthwork construction projects implemented by municipalities, Ports, other governmental jurisdictions, or the private sector to obtain solid waste permits for temporary construction material stockpiles. We further understood that Ecology would include exemptions from regulation for stockpiles managed under appropriate National Pollution Discharge Elimination System (NPDES) permits.

Unfortunately, we are now deeply concerned that these understandings are not reflected in the current proposed regulation. We believe problems with the proposed regulation center on Sections 100 (definitions) and 320 (piles) as they apply to construction project duration and temporary stockpiles of materials including broken paving material, contaminated soil, and contaminated dredged material which WPPA members often use to construct projects at seaports, airports, rail, commercial, and industrial facilities.

The following specific comments reflect our most pressing concerns with the proposed regulation:

Section 100 - Definitions. The new definitions for contaminated soil and contaminated dredged material require that Chapter 173-340 WAC Model Toxics Control Act (MTCA) cleanup levels be "...established for the location that the soil is placed." Specific comments include:

One of Ecology's stated goals for the soil handling revisions in WAC 173-350 was to provide a consistent and dependable statewide approach to assess soil quality. The proposed approach to develop MTCA cleanup levels applicable to the "placement location" introduces complexity and corresponding uncertainty. This is due in part to the number of environmental factors and engineering measures considered in MTCA site cleanup level development. To ease the implementation burden that will be placed on Jurisdictional Health Authority (JHA) representatives, improve consistency and improve statewide compliance, we request that Ecology default to simpler tabulated cleanup levels such as MTCA Table 740-1 Method A Soil Cleanup Levels for general soil acceptability screening.

If Ecology requires that the evaluation of soil and dredged material quality include consideration of MTCA Method B criteria, such as the protection of groundwater, we request that Ecology explicitly provide for the consideration of engineering controls, such as paved surfaces, in determining which migration pathways must be considered in developing cleanup levels. Otherwise, most evaluations of soil and dredged material in Western Washington will require the application of MTCA criteria for protection of groundwater and surface water that will largely preclude the reuse of soil and dredged material originating from many, if not most, ports.

[Commenter: O-06]

<p>O-13-08</p> <p>WRRRA opposes the spreading of contaminated soils throughout the state. We believe that Governor Inslee and the Department share this concern, as evidenced by a number of initiatives dealing with toxic products and their effects on human health and safety and the environment. The current work group's draft rule lacks adequate oversight and enforcement by DOE and local JHDs and allows contaminated soils to be used across the state, even in publicly accessible sites in some instances. Neither WRRRA, nor any representative from the solid waste industry nor a landfill operator were invited to participate in this work group or allowed to join upon request. The soils group also lacked participation by other interested parties, including any environmental groups, county solid waste divisions, or the Tribes of Washington, all of which could be concerned with the environmental and storm water impacts associated with spreading contaminated soils across the state,</p> <p>It is unclear to us why the rule moves away from Model Toxic Control Act standards on certain contaminants or how this rule benefits environmental efforts at all. Tacitly allowing contaminated soil to be spread across the state seems in clear conflict with DOE's mission statement to, "protect, preserve and enhance Washington's environment for current and future generations." The potential effects of spreading contaminated soils on storm water and water quality issues appear even more at odds with Governor Inslee's recent prioritization of clean water, "My goal all along has been to update Washington's clean water rule with one that assures the health of Washington's people, fish and economy." Some of the soil screening limits do not appear to have a clear source in MTCA, or any citable source beyond the negotiations of the work group.</p>	<p>O-13-08</p> <p>Regarding the stakeholder workgroup, please see response to comment O-16-05.</p> <p>Regarding other comments, please see response to comment O-16-07.</p>
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<p>WRRRA opposes exempt facilities, and the soils rule essentially creates another exemption from solid waste handling activities with even weaker record keeping, oversight, and enforcement requirements. The draft rule requires that a company using contaminated soils perform "due diligence" to determine whether a soil may be contaminated. However, the due diligence requirement can be satisfied in various ways short of actually performing analytical tests on soils, and it's not clear that the company needs to provide any documentation or keep records of whatever steps it took to meet its "due diligence" requirement. As written now, a company, on its own, can make the determination not to test a soil for contaminants and use it across the state without keeping any record of where the soil originated, where it was placed, and what if anything was done to ensure the soil fell below the soil screening limits. Today, many contaminated soils go to highly regulated lined landfills with groundwater monitoring, stormwater controls, and gas collection and air emissions monitoring, in deep contrast to the unmonitored land application of contaminated soils throughout the state.</p> <p><i>[Comment included a footnote: Inslee announces new path on water quality rule, continues work on broader toxics reduction efforts. http://www.governor.wa.gov/news-media/inslee-announces-new-path-water-quality-rule-continues-work-broader-toxics-reduction]</i></p> <p>[Commenter: O-13]</p>	
<p>O-13-09</p> <p>Additionally, the soils work group purports to change the definition of solid waste in WAC 173-350. Solid waste is defined by statute in 70.95, changing that definition by rule to accommodate contaminated soils is unnecessary and, as with definitions, an overreach. Furthermore, the change appears largely</p>	<p>O-13-09</p> <p>Regarding the stakeholder workgroup, please see response to comment O-16-05.</p> <p>Other parts of the comment reference language from earlier versions of the rule that no longer exist. As suggested by the commenter, the latest proposed</p>

<p>cosmetic by re-branding formerly contaminated soils as "impacted soils." WRRRA supports the existing definition of solid waste, this change appears unnecessary and disingenuous as contaminated soils and sediment are already covered in the existing definition. WRRRA opposes the current soils rule and requests industry representation on the soils and all other work groups convened as part of the 173-350 rule update.</p> <p>[Commenter: O-13]</p>	<p>language uses the existing definition of solid waste, which includes the term contaminated soil.</p>
<p>O-14-18</p> <p>Initially we must ask, who will be responsible for the "self-regulating" community under this rule? Will it simply be a complaint based system? A system which only steps in after the damage has been done for clean-up and remediation efforts? For solid waste, a history and experience has proven that a more proactive regulatory approach is required. WRRRA's chief concerns are the high potential of abuse with the lack of notice to DOE or local JHD's regarding the movement of contaminated soil, the weak "due diligence" requirement defined in WAC 173-350-100, and other changes to longstanding definitions in service to this section.</p> <p>First, the latest draft rule eliminates baseline notice requirements to local JHD's regarding the movement of contaminated soil. The elimination of notice requirements has the potential to severely undermine the rule. Regulators will face difficulties even locating parties accountable under the rule if they are unaware contaminated soil is moved and by who, or which contractor on a large project. This task is made even more difficult because the "due diligence" component of the rule does not require parties to keep records either. The local JHD should be notified regarding the transportation or use of contaminated soils.</p>	<p>O-14-18</p> <p>Please see response to comment O-16-08.</p>

<p>Second, the draft rule requires that a company using contaminated soils perform "due diligence" to determine whether a soil may be contaminated. However, the due diligence requirement can be satisfied in various ways short of actually performing analytical tests on soils, and the company does not need to provide any documentation or keep records of whatever steps it took to meet its "due diligence" requirement. As written now, a company, on its own, can make the determination not to test a soil for contaminants and use it across the state without keeping any record of where the soil originated, where it was placed, and what if anything was done to ensure the soil fell below the soil screening limits. Today, many contaminated soils go to highly regulated lined landfills with sophisticated controls to prevent accidental release or harm to the environment, in deep contrast to the unmonitored land application of contaminated soils throughout the state.</p> <p>[Commenter: O-14]</p>	
<p>O-14-19</p> <p>Additionally, the draft purports to change the definition of solid waste in WAC 173-350-100 to replace "contaminated soils" with "impacted soils". Changing the definition of solid waste to accommodate contaminated soils is unnecessary and confusing. The term "impacted soils" is ambiguous and lacks clear meaning to a casual observer. The rule section and definitions should proceed with the existing and self-evident definitional term "contaminated soil." Furthermore, the change appears largely cosmetic by rebranding formerly contaminated soils as "impacted soils." WRAA supports the existing definition of solid waste, this change appears unnecessary and disingenuous as contaminated soils and sediment are already covered in the existing definition.</p>	<p>O-14-19</p> <p>Please see response to comment O-16-08.</p>

<p>[Commenter: O-14]</p>	
<p>O-14-20</p> <p>It is unclear to us why the rule moves away from Model Toxic Control Act standards on certain contaminants. In the end, this proposal seems to be the end result of several years of remedies rejected by the legislature. Furthermore, the effects of allowing the movement of contaminated soil throughout the state without even so much as notice to the local JHD seems at odds with other DOE goals regarding storm water and water quality issues, with a huge potential for surface water contamination along street ditches and other surface water implications. The rule is also at odds with DOE's mission statement, to "protect, preserve and enhance Washington's environment for current and future generations." Under the current rule, future generations will not know where contaminated soils have been used due to the lack of notice nor the level of contaminated soil due to the weakness of the due diligence requirement.</p> <p>[Commenter: O-14]</p>	<p>O-14-20</p> <p>Please see response to comment O-16-08.</p>
<p>O-16-05</p> <p>WAC 173-350-235 and 173-350 995 Soil and Sediment Criteria: WRRRA has serious concerns regarding the proposed sections on Soil and Sediment Criteria. WRRRA and several member solid waste companies requested representation on the work group to voice these concerns and were repeatedly denied.</p> <p>[Commenter: O-16]</p>	<p>O-16-05</p> <p>The stakeholder workgroup was comprised of eleven representatives of businesses and agencies Ecology knew had a role in managing or overseeing soil handling in the state. WRRRA asked to participate after the group had been meeting for almost a year. Given that decisions and progress were already a year underway, WRRRA was invited to observe future meetings, but was not asked to participate as a stakeholder. Only one solid waste company asked to participate after the stakeholder workgroup was formed and was invited to all future meetings, but never participated.</p>

<p>O-16-06</p> <p>The "due diligence" requirements are very weak and place discretion for the use of contaminated soils in the hands of a company which receives effectively no oversight under the proposed rule. The final draft rule does not require any formal assessment. Many operators will simply complete a visual inspection or an ownership/use review. This type of evaluation conducted by unqualified observers without a specific regulatory protocol is extremely open to abuse. While the goal of more tightly regulating contaminated soils may be worthwhile, the weak due diligence requirement provides a safe harbor for those looking to cheat an easily exploited system.</p> <p>[Commenter: O-16]</p>	<p>O-16-06</p> <p>Please see response to comment O-16-08.</p>
<p>O-16-07</p> <p>Moreover, there is an existing protocol to handle and manage soils, such as petroleum contaminated soils, with DOE's Guidance for Remediation of Petroleum Contaminated Sites, originally published in November 1995 and updated in September 2011. This document provides direction to owners, operators, consultants, and DOE on remediation of contaminated sites and soils, including compliance with cleanup standards, under the singularly relevant Model Toxics Control Act (MTCA), Chapter 70.105D. This important document also addresses guidelines for the reuse the contaminated soils, including specified categories for the use of soils. These categorized uses of contaminated soil, if they meet certain standards, can be acceptably used for various projects such as backfill at cleanup sites above the water table, road and bridge embankment construction, and road base material. Thus, a workable protocol exists and does not need to be recreated and modified in the solid waste handling standards. MTCA should continue to be the controlling and</p>	<p>O-16-07</p> <p>The comment references language from an earlier version of the rule that no longer exists. As suggested by the commenter, new language proposes to use MTCA as the standard for determining appropriate placement for soils impacted by release of a contaminant.</p>

<p>implementing law in the remediation and use of contaminated soils, as it is remains now.</p> <p>[Commenter: O-16]</p>	
<p>O-15-38</p> <p>WAC 173-350-995 Soil and Sediment Criteria and Use.</p> <p>WRRRA supports the safe and environmentally responsible handling of solid waste. Regulation works for solid waste, and contaminated soils are included in the definition of solid waste. WRRRA supports the general goal of ensuring the safe management and disposal of contaminated soils along with all solid waste. However, we continue to have the same concerns with the overall operating structure of the rule. The soils rule still falls short in crucial areas which threaten to undermine both the goals of the rule and Washington's system for the safe and responsible disposal of solid and contaminated waste to ensure public safety and environmental protection</p> <p>First, the due diligence requirement continues to be problematic and places too much trust and authority in the hands of the entities the rule purports to regulate. WRRRA and the solid waste industry has seen firsthand the effects of "self-regulation" solid waste facilities with exempt facilities under the current WAC 173-350-210 & 310. Effective regulation of solid waste requires a proactive approach, including actual enforcement, notice, and verification.</p> <p>The draft rule requires that a company using contaminated soils perform "due diligence" to determine whether a soil may be contaminated. However, the "due diligence" requirement can be satisfied in various ways short of actually performing analytical tests on soils, and the company does not need to provide any documentation or keep records of whatever</p>	<p>O-15-38</p> <p>Please see response to comment O-16-08.</p>

<p>steps it took to meet its "due diligence" requirement. As written now, a company, on its own, can make the determination not to test a soil for contaminants and use it across the state without keeping any record of where the soil originated, where it was placed, and what (if anything) was done to ensure the soil fell below the soil screening limits. Today, many contaminated soils go to highly regulated lined landfills with sophisticated controls to prevent accidental release or harm to the environment, in deep contrast to the un-monitored land application of contaminated soils throughout the state.</p> <p>As discussed above, the "self-authorizing" nature of the rule and due diligence requirement is extremely problematic. Changes to the definition will not cure these structural defects, but will provide for a stronger rule.</p> <p>"Due diligence" means making a good faith effort using investigative techniques to determine whether there may have been a release on a property. Investigative techniques [stricken "may"] [inserted "must"] include use of one or more of the following [inserted "techniques"], as warranted by circumstances.</p> <p>The current language is permissive and should be made mandatory. Furthermore, entities performing "due diligence" should be required to keep detailed records documenting their efforts. The "due diligence" requirement is of little real value If there are no mechanisms for accountability.</p> <p>[Commenter: O-15]</p>	
<p>O-15-39</p> <p>Second, the new draft rule does contain several positive changes with regards to notice, but much more is required. The new notice requirements to public health are crucial, but</p>	<p>O-15-39</p> <p>Please see response to comment O-16-08.</p>

<p>they only apply when managing over 2,000 cubic yards. The requirement appears woefully deficient in practical application. In the case of an average 10 yard dump truck, an operator can move 200 dump trucks full of potentially contaminated soil before having to notify the local JHD. The other new notice provision, requiring an operator to place a deed notice on properties receiving over 2,000 cubic yards of contaminated soil is an interesting, and necessary approach. However, the threshold is too high. Notice to JHDs regarding the movement of contaminated soils should be required at virtually any level. However, at a minimum, notice should be required at the 250 cubic yard level present in the current WAC 173-350 for inert waste landfills</p> <p>[Commenter: O-15]</p>	
<p>O-15-42</p> <p>Fifth, the rule proscribes that contaminated soil and sediment managed in accordance with the soils section is not solid waste handling. This language is false, problematic with regards to the rest of the rule, and even the definition of solid waste in the rule update. Contaminated soils are solid waste, period, no matter what they are called. As discussed above, we do not believe the Department should proceed with the soils section as written. However, if the Department does proceed, it is crucial to revise this language. Contaminated soil managed in accordance with the soil and sediment criteria section should be conditionally exempt from solid waste permitting requirements at most, and not categorically defined outside solid waste entirely. The language as written is inconsistent with statutory authority in RCW 70.95 and inconsistent with the Department's own approach in virtually every other section of this rule.</p>	<p>O-15-42</p> <p>Please see response to comment O-16-08.</p>

[Commenter: O-15]	
<p>O-15-43</p> <p>Finally, it's not clear that the Department has the statutory authority to enact the soils rule at all. The rule essentially creates a new class of largely unregulated exempt facilities. The Department's authority in RCW 70.95.305 to exempt facilities is contingent on the facility presenting "little or no environmental risk" and meeting "the environmental protection and performance requirements required for other similar solid waste facilities." Based on the materials in question, contaminated soils, and the lack of notice and reporting requirements, the Department cannot honestly make that determination. Further, the rule's new regulatory regime is a large break from established practice and the type of change that ordinarily requires legislation to implement. In fact, legislation regarding the movement of contaminated soils has been proposed and rejected in recent legislative sessions.</p> <p>[Commenter: O-15]</p>	<p>O-15-43</p> <p>Please see response to comment O-16-08.</p> <p>The Assistant Attorney General's office has advised the agency that there is authority under Chapter 70.95 RCW, Solid waste management - Reduction and recycling, for Ecology to set standards for management of soil containing contaminants.</p>
<p>O-15-44</p> <p>Soil and Sediment Criteria and Use Comments Summary:</p> <p>The overall structure of the rule, particularly the "due diligence" requirement are largely unaltered, continue to be problematic, and will ultimately undermine the goal of the rule.</p> <p>[Commenter: O-15]</p>	<p>O-15-44</p> <p>Please see response to comment O-16-08.</p>
<p>O-15-45</p>	<p>O-15-45</p> <p>Please see response to comment O-16-08.</p>

<p>Soil and Sediment Criteria and Use Comments Summary:</p> <p>The current draft makes some progress with notice to local JHDs, but stronger requirements are needed.</p> <p>[Commenter: O-15]</p>	
<p>O-15-49</p> <p>Soil and Sediment Criteria and Use Comments Summary:</p> <p>The Department lacks statutory authority to enact this rule and legislation is required for such a sweeping departure from existing practice.</p> <p>[Commenter: O-15]</p>	<p>O-15-49</p> <p>Please see response to comment O-15-43.</p>
<p>O-16-08</p> <p>Several Soil Screening Limits (SSLs) appear at odds with DOE's own priorities with regards to stormwater. Regarding total petroleum hydrocarbons (TPH), TPH clean soil targets for heavy oil (2000 mg/kg) and mineral oil (4000 mg/kg) appear too high to be consistent with DOE's oil spill reporting criteria and their stormwater "sheen" benchmark. Additionally, copper is not included in the basic soil or street waste screening parameters. This absence conflicts with DOE's enforcement of copper in stormwater regulations. The copper stormwater benchmark in Western Washington is 14 micrograms/liter or a 700 to 7000 dilution from a typical street sweeping concentration.</p> <p>[Commenter: O-16]</p>	<p>O-16-08</p> <p>The comment references language from an earlier version of the rule that no longer exists.</p>
<p>O-05-06</p>	<p>O-05-06</p>

Definition of Clean & Contaminated Soil:

WRRRA generally supported the objective of the previous proposed contaminated soils section, but had concerns with the “self-enforcing” nature of the proposed rule. Contaminated soils are solid waste and regulation to ensure that they are safely and responsibly managed is warranted like with any waste. The approach taken in the new rule appears consistent with statutory authority and relies on established standards from the Model Toxics Control Act. WRRRA still supports the objective of these changes, but reiterates that effective regulation requires effective enforcement.

Applicability and Definitions Comment Summary:

- Additional clarity is required in the applicability section to note that materials in that section managed improperly can become solid waste under the determination of waste test.
- The definition of recycling in the draft rule should be include language which specifies that a true transformation into something of value is required for a material to be recycled.
- Definition of commodity should use more specific examples.
- Successful regulation for contaminated soils and any other waste requires effective enforcement.

[Commenter: O-05]

The determination of solid waste section does not apply to contaminated soil as excluded in WAC 173-350-021(1)(a). To provide clarity on where these materials need to be managed, Ecology added language to the definitions of “contaminated soil” and “contaminated dredged materials” stating that they are solid waste and must be managed at a solid waste facility. Effective enforcement at such facilities is up to jurisdictional health agencies.

Ecology added reference to the determination of solid waste in the applicability section, WAC 173-350-020(1). Please see response to comment O-05-03.

Ecology is limited by the definition of “recycling” in Chapter 70.95 RCW, but added clarifying language to the definition in the adopted rule. Please see response to comment O-05-04.

For definition of “commodity” please see response to comment O-05-05.

<p>A-19-06</p> <p>"Street Waste"</p> <p>The new definition groups street sweepings and drainage conveyance material together, and establishes these materials as 'waste.' WSDOT does not agree with this assumption, as these materials vary greatly from region to region across the state. Urban areas could expect to see a higher potential for contamination compared to more rural areas that have less traffic and development. WSDOT recommends that Ecology remove this definition or replace it with a version based on threats to human health and the environment, and provides a method for considering regional differences.</p> <p>[Commenter: A-19]</p>	<p>A-19-06</p> <p>The definition is substantively consistent with definitions in existing guidance for managing street waste found in Stormwater Management Manuals for eastern and western Washington. Also, Ecology has consistently stated and written into guidance that street waste is solid waste subject to solid waste handling standards. The rule attempts to clarify existing conditions, though provides somewhat less restrictive standards by acknowledging that street waste may be, not is, a contaminated soil. See also responses to comment A-05-15 and comment A-05-17.</p>
<p>A-19-09</p> <p>"Release"</p> <p>The new definition creates confusion with other applicable regulations. WSDOT recommends removing this definition or replacing it with a definition that references existing regulations that define or otherwise address releases.</p> <p>[Commenter: A-19]</p>	<p>A-19-09</p> <p>As the commenter suggests, the definition is consistent with that found in Chapter 173-303 WAC, Dangerous waste regulations, with some changes that would not have related to soil, such as references in the definition to abandoned containers.</p>
<p>A-19-01</p> <p>The Washington State Department of Transportation (WSDOT) appreciates the opportunity to provide comments on the Department of Ecology's (Ecology) Final Public Draft Solid Waste Rule Revision to Chapter 173-350 WAC.</p> <p>The proposed rule differs substantially from the preliminary rule revision that resulted from a</p>	<p>A-19-01</p> <p>Ecology appreciates comments about earlier drafts of the rule, but these earlier drafts were largely unsupported by commenters, who found them too complex, too restrictive, and suggested use of MTCA, as that has been by and large the industry standard in deciding how to manage soils impacted by release of a contaminant. Ecology feels the proposed broadening of the definition of "contaminated soils" provides clarity to operators in deciding where they can place materials in a manner</p>

<p>significant stakeholder participation process. It represents a missed opportunity to improve solid waste handling in the state particularly with respect to managing construction and maintenance soils. The proposed rule establishes new soils disposal requirements that are unclear and, as a result, will be subject to differing interpretations by Jurisdictional Health Departments (JHDs) across the state. This lack of clarity creates regulatory uncertainty for WSDOT and our contractors in terms of identifying disposal options for routine maintenance operations and construction projects. We expect that the rule will lead to more soil disposal in landfills that, instead, could be safely reused. As an example, the proposed rule would not allow excess soils from WSDOT construction and maintenance operations to be used as alternate daily cover at landfills.</p> <p>[Commenter: A-19]</p>	<p>that has protective concentrations that have been assessed by a regulatory body, as well as provides authority to jurisdictional health departments to stop an entity from placing contaminated materials where it should not. Ecology will develop guidance for managing soils in light of the proposed clean soil and contaminated soil definitions.</p> <p>The commenter is not correct about potential use as alternative daily cover. Like any material, a person can choose to manage soils at a landfill. The definitions for “clean soil” and “contaminated soil” are tied to "placement on or into the ground," not disposal at a solid waste handling facility. Ecology added language to the definitions to provide clarity on this.</p>
<p>A-19-03</p> <p>"Clean Soil"</p> <p>A) This definition is unclear especially with regard to MTCA references. Lack of clarity will lead to differing interpretations by JHDs. As an example of implications, WSDOT is currently permitted to place/reuse road maintenance materials that contain elevated concentrations of Carcinogenic Polycyclic Aromatic Hydrocarbons (PAH) on WSDOT owned property (e.g., for use on highway shoulders). Under the proposed new definition, this would likely no longer be allowed. This problem is a consequence of not including an 'impacted soils' section as was contained in a prior proposal. We strongly recommend that Ecology insert provisions into the rule that specifically address impacted soils, instead of attempting to regulate these soils in the definitions section.</p>	<p>A-19-03</p> <p>Ecology is considering the creation of guidance on managing soils impacted by release of a contaminant to help with statewide consistency in implementing the proposed rule. Earlier versions of the rule attempted to include provisions to provide clarity and flexibility requested by the commenter, but these earlier versions were largely unsupported by commenters, leading to the simplified version proposed now.</p> <p>Testing would only be expected for deciding where to place soils impacted by release of a contaminant. “Clean soil,” as defined, includes soil not impacted by release of a contaminant. Ecology has revised the definition of “clean soil” to clarify that soils in their natural background condition are clean soil given that no release of a contaminant has occurred. Ecology has also revised the definition of “clean soil” to include examples of potentially clean soils. It includes soils from undeveloped lands not impacted by releases from industrial or historic</p>

B) The definition infers sampling is required for moving any material. The outcome will increase costs without clear rationale. In practice, the new definition will require WSDOT and its contractors to characterize all materials to be moved, and test all locations where the materials are to be placed, in order to establish site-specific conditions.

C) The rationale supporting a new pH requirement is unclear. This new restriction is inconsistent with the intent of RCW 70.95.805, in which the Legislature directed WSDOT and its contractors to utilize more recycled concrete in projects. The new requirement will further limit what types of material qualify as clean, increasing costs and requiring disposal of potentially reusable material into a landfill. pH is already addressed by water quality and dangerous waste regulations. Information supporting further pH regulations hasn't been identified and these requirements could curtail common sense handling of material outside the 4.5 to 9.5 pH range. WSDOT recommends removing pH from this definition.

"Contaminated Soil"

A) The proposed modification to the current definition will create an uncertain process for establishing site-specific standards that will add substantial difficulty in managing soils from construction projects and other transportation activities. The proposed definition will require WSDOT and its contractors to characterize all materials to be moved, and test all locations where the materials are to be placed, resulting in substantial increases in time and cost to construction and road maintenance activities.

B) The basis for the new pH provision is unclear, and WSDOT is concerned about creating a restrictive new environmental standard without appropriate justification. WSDOT recommends Ecology remove the pH proposal from the rule, as there is no

activities, and similar soils over which development may have occurred, but land use is unlikely to have led to a release, such as use for residential housing, or over which development provided protection from releases, such as coverage by pavement.

The rule language makes no reference to required testing, and assumes a person managing a material will use their judgement in making decisions about whether testing may be warranted. This is consistent with how industry currently manages these materials. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils. In this rule, Ecology added a standard to provide statewide consistency and to be enforceable should someone manage material at a location that poses risks to human health and the environment.

pH below 4.5 and above 9.5 can pose risks to human health and the environment. The limits proposed are largely consistent with water quality regulations. pH has been a concern primarily in regard to disposal of engineered soil, which can have a very high pH and has posed risks when managed at inappropriate locations. High pH is the primary concern with engineered soil as high pH could lead to mobilization of naturally-occurring metals in the soil, and can lead to impacts to surface water where disposal is uncontrolled. If one can reuse these soils in another project for the same engineering properties, Ecology excluded that activity from the rule as it is not viewed as solid waste disposal, but as reuse, as defined in the rule. Ecology also excluded from the rule any replacement of such material back to the point of generation [WAC 173-350-020(y)]. If a person must otherwise dispose of engineered soil where pH or other contaminants would be above MTCA levels that would apply to the proposed placement site, then it must be managed as contaminated soil at a solid waste handling facility that meets applicable rule requirements.

Recycled aggregate, such as crushed concrete, is not soil and its use is unaffected by changes to clean

demonstrated environmental need related to solid waste. Existing water quality and dangerous waste regulations can be used to address pH concerns.

C) Per a conference call discussion convened by Ecology on July 11, 2017, WSDOT requested that "street waste" be removed as an example of contaminated soils. The nature of street waste varies considerably, from clean to contaminated, and as such it is not an example of 'contaminated soil' or 'clean soil'. If this term is used as an example, regulators will assume that all street waste is contaminated, which it is not. WSDOT does not agree that street waste is typically contaminated to the degree that would require disposal in a solid waste landfill. Because of the lack of information demonstrating that street waste is illustrative of 'contaminated' material, WSDOT continues to recommend removing "street waste" as an example of this definition.

D) The modified definition refers to engineered soils as an example of contaminated soil. WSDOT is not aware of any information provided by Ecology that suggests engineered soils should be considered contaminated. WSDOT requests that this example be removed from the contaminated soil definition.

E) The revised definition will significantly impact WSDOT's maintenance operations. With the changes proposed, WSDOT would be required to test all materials from maintenance operations even when there is no reason to assume material is contaminated. And, most materials would require landfill disposal. Current regulations allow street waste to be placed on WSDOT property if certain site criteria are met. WSDOT's construction and road maintenance costs would likely increase dramatically with this modified definition.

[Commenter: A-19]

soil and contaminated soil definitions. Ecology adjusted definitions for both "soil" and "engineered soil" to clarify that concrete and asphalt are not soil.

The commenter is not correct about material characterization or testing of placement site. The rule does not require characterization of all materials and makes no reference to testing at a placement site. Ecology feels soil that contains contaminants from a release could be harmful and should be assessed to ensure use of such materials does not pose a risk to human health or the environment. This is already largely standard industry practice. This may apply to construction site soils. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils.

Ecology believes soil that contains contaminants from a release could be harmful and should be assessed to ensure use of such materials does not pose a risk to human health or the environment. Street waste is one such type of material. Stormwater conveyance structures are places where contaminants from streets can accumulate at concentrations that could be harmful if indiscriminately placed. Throughout the rule revision process, it has been clear that listing the types of materials Ecology intends to provide standards for in relation to soils is helpful, and street waste is one of the targeted types that has been inconsistently managed in the state. The definitions do not preclude a person from deciding that no release to soils has occurred and managing those soils as clean soils. Also see response to comment A-05-15 regarding street waste.

"Engineered soil," as defined, has been altered by addition of products like jet grout, which results in the creation of high pH soils. This constitutes a "release" as defined. High pH is the primary concern with engineered soil as high pH could lead to mobilization of naturally-occurring metals in the soil, and can lead to impacts to surface water where disposal is uncontrolled. If one can reuse these soils in another project for the same engineering

	<p>properties, Ecology excluded that activity from the rule as it is not viewed as solid waste disposal, but as “reuse,” as defined in the rule. Ecology also excluded from the rule any replacement of such material back to the point of generation [WAC 173-350-020(y)]. If a person must otherwise dispose of engineered soil where pH or other contaminants would be above MTCA levels that would apply to the proposed placement site, then it must be managed as contaminated soil at a solid waste handling facility that meets applicable rule requirements.</p>
<p>A-19-07</p> <p>"Petroleum Contaminated Soil"</p> <p>The new definition is unclear - WSDOT recommends that the definition and associated requirements be appropriately synchronized with other applicable regulations and guidance that govern petroleum contaminated soils to avoid confusion (i.e., MTCA, Dangerous Waste, UST, and Guidance for Remediation of Petroleum Contaminated Sites, Section 12, Publication No. 10-09-057, Ecology published revision 2016).</p> <p>[Commenter: A-19]</p>	<p>A-19-07</p> <p>Ecology created the definition for “petroleum contaminated soil” as there is no existing definition and is unsure what is unclear based on the comment provided. Ecology defined “petroleum contaminated soil” to differentiate it from street waste. The term was used in earlier drafts of the rule where a list of constituents to test for in petroleum contaminated soil that differed from those for street waste was provided. Though the only reference in the rule to “petroleum contaminated soils” is in the definition of contaminated soil, Ecology anticipates writing guidance where the distinction between street waste and petroleum contaminants soils will be helpful.</p>
<p>O-08-01</p> <p>[Oral testimony] Okay, great. Heather Trim, Zero Waste Washington. I have two comments.</p> <p>The first one is just a repeat of what I was asking about before. And I think it would just be great if in the rule it could be clear what the criteria is for determining clean-up standards when material is being placed at a site.</p> <p>[Commenter: O-08]</p>	<p>O-08-01</p> <p>Ecology has added the following parenthetical language regarding references to MTCA cleanup levels to the definitions of “clean dredged material,” “clean soil,” “contaminated dredged material,” and “contaminated soil”:</p> <p>“...that would be established [for existing land use] at the location where material is placed...”</p>

<p>23. Performance Standards</p>	<p>Go to Table of Contents Go to Commenters and Associated Topics Go to Index of Comments</p>
<p>Comment</p>	<p>Response</p>
<p>A-16-02</p> <p>-040 SHD likes the changes to the performance measures as they are inclusive without giving one regulation more weight.</p> <p>[Commenter: A-16]</p>	<p>A-16-02</p> <p>Comment noted.</p>
<p>B-10-06</p> <p>WAC 173-350-040 PERFORMANCE STANDARDS</p> <p>Comment 6. <u>Ecology should delete WAC 173-350-040(3) because it is unnecessary and Ecology and local health districts have no authority to enforce laws and regulations delegated to other local, state, and federal authorities.</u></p> <p>Subsection (3) requires facilities to “comply with all other applicable local, state, and federal laws and regulations.” This is a meaningless and redundant requirement, yet one that could present the potential for mischief. <i>First</i>, if other local, state, and federal laws and regulations are applicable, there is no need for Ecology to require compliance with them. If they are “applicable”, then they apply and the facility must comply with them already. Adding this provision does not make them “more” applicable.</p> <p><i>Second</i>, while this section may appear harmless, it would unlawfully delegate to</p>	<p>B-10-06</p> <p>The performance standards in WAC 173-350-040 do not represent a new requirement. The section reflects the statutory requirements found in RCW 70.95.185(1) and RCW 70.95.305(3). Nothing in the language delegates authorities beyond those outlined in Chapter 70.95 RCW.</p>

Ecology or the health districts the authority to enforce laws and regulations that they have no lawful authority to enforce. It could also interfere with the authority of other local, state, or federal authorities to enforce its own laws and regulations. For example, if a local air pollution control district determines that a facility complies with the air regulations, the health district might decide otherwise and seek to enforce the air district regulations under the purported authority of WAC 173-350-040(3). Or, the health district might delay issuing a permit because it thinks that a facility is violating the federal prevailing wage requirements, even though it has no enforcement authority.

Third, non-compliance with another regulation or law should not be grounds for a health district or Ecology to deny or revoke a permit. Even if the violation is proven, the other agency might not believe that it justifies shutting the facility down. So, why should Ecology have the authority to do otherwise?

Fourth, where does this end? If a health district reviews a permit application, it must determine whether the facility “meets the performance standards of WAC 173-350-040.” How can the health district review a facility’s compliance with every conceivable “local, state, and federal law and regulation”? Will the health district have to inspect for compliance with the building codes or review tax documents to determine whether the operator has paid its taxes correctly? Will it inspect the facilities’ fire extinguishers and handrails to determine compliance with WISHA or the ADA? While these examples made seem absurd, WMW has had direct experience

<p>with a health district threatening to withhold a permit because the facility was subject to a MTCA Administrative Order on Consent associated with historical contamination.</p>	
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[Commenter: B-10]

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